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Gross financial wealth or net financial strength? Household balance sheets and economic development in the European Union

Floarea Iuliana SUSU
Bucharest University of Economic Studies
iuliana.susu@yahoo.com

Abstract. *Household financial wealth is often treated as a visible sign of economic strength, yet its gross size offers only a partial view of how household finance relates to development. The European evidence challenges the idea that larger household financial assets are, by themselves, associated with stronger economic performance. Gross financial wealth does not provide a robust growth signal when separated from liabilities, portfolio structure and country-specific conditions. The stronger pattern emerges from net financial strengthening, where improvements in the household sector's financial position after debt is taken into account are positively associated with real economic performance. This distinction changes the interpretation of household wealth: the relevant issue is not simply how much financial wealth households hold, but whether that wealth improves the resilience and net capacity of the household balance sheet. The findings support a balance-sheet quality perspective in which financial assets become economically meaningful only when they translate into stronger net positions. Economic development is therefore connected less with the visible accumulation of gross household wealth and more with the financial strength that remains once liabilities are considered.*

Keywords: household financial wealth; net financial assets; household balance sheets; economic development; European Union.

JEL Classification: D14, E21.

Introduction

Household financial wealth has become a central variable in debates on economic development because it connects private saving, financial intermediation, portfolio allocation and macroeconomic performance. The classical finance–growth literature established that financial systems can support long-run growth by improving information, mobilising savings and allocating capital more efficiently, but this tradition mainly examined banks, markets and aggregate financial depth rather than the internal structure of household balance sheets (King & Levine, 1993; Levine, 2005; Beck et al., 2000). The European case requires a more careful distinction. A household sector with large financial assets is not necessarily stronger if asset accumulation is accompanied by rising liabilities, weak portfolio diversification or uneven access to productive financial instruments.

The relationship between finance and growth has never been purely mechanical. Financial intermediation can stimulate capital accumulation and productivity, yet its growth relevance depends on institutional quality, allocation mechanisms and the capacity of economies to transform financial resources into productive activity (Levine et al., 2000; Aghion et al., 2005; Beck & Levine, 2004). Research on finance, inequality and the poor also shows that financial development matters through distributional and access channels, not only through aggregate financial size (Beck et al., 2007). This broader perspective is particularly relevant for the European Union, where household financial positions differ widely across countries with different pension systems, credit structures, capital market participation and post-crisis adjustment paths.

Household finance offers a more suitable conceptual frame because it treats households as active financial units that save, borrow, insure, invest and manage risks under constraints that differ across income groups and institutional settings. Campbell (2006) placed household financial decisions at the centre of modern financial economics, while Guiso and Sodini (2013) described the field as a domain concerned with the way households use financial markets to organise intertemporal choices, portfolio exposure and borrowing decisions. International comparative evidence confirms that household balance sheets vary strongly across advanced economies, especially in retirement savings, risky asset holdings, mortgages and unsecured debt (Badarinza et al., 2016). Financial literacy further conditions participation in market-based assets, which means that household wealth cannot be understood only as an aggregate stock detached from knowledge, access and portfolio choice (van Rooij et al., 2011).

The macroeconomic relevance of household wealth is often discussed through consumption channels, but this connection is also heterogeneous. Financial and housing wealth can affect spending, though the magnitude and stability of wealth effects differ by asset type, liquidity and household constraints (Carroll et al., 2011; Case et al., 2005). Liquidity constraints alter saving and growth behaviour, which makes household financial structure relevant for macroeconomic adjustment rather than merely for private portfolio composition (Jappelli & Pagano, 1994). Evidence on household investment behaviour also indicates that participation, diversification and financial sophistication shape the efficiency with which households hold and manage assets (Calvet et al., 2007). A larger gross

financial position may therefore coexist with weak development relevance if it does not correspond to a stronger net position or a more resilient balance sheet.

The debt side of household balance sheets gives this distinction its macro-financial importance. Credit booms have repeatedly been linked to financial instability, and the historical evidence shows that rapid credit growth is a powerful predictor of crisis episodes (Schularick & Taylor, 2012). Asset-price expansions become especially costly when they are fuelled by leverage, since credit-financed bubbles tend to be followed by deeper recessions and slower recoveries (Jordà et al., 2015). At household level, balance-sheet shocks influence consumption more strongly among more indebted households, and increases in household debt ratios predict weaker subsequent growth and higher unemployment in cross-country evidence (Mian et al., 2013; Mian et al., 2017). These findings shift attention from asset ownership alone to the net financial position that remains after liabilities are considered.

Recent finance–growth research also questions the assumption that more finance is always growth-enhancing. Loayza and Rancière (2006) distinguish between financial development and financial fragility, while Rousseau and Wachtel (2011) show that the finance–growth association weakened in more recent data compared with earlier cross-country evidence. Non-linear approaches indicate that financial development may support growth only up to a certain threshold, beyond which additional financial depth can become less favourable or even harmful (Arcand et al., 2015; Law & Singh, 2014). Beck et al. (2014) further separate intermediation from the size of the financial system, showing that the real-sector relevance of finance depends on what finance does rather than on how large the financial sector becomes.

The novelty lies in moving the European household-finance debate from gross financial wealth towards net financial strength. Instead of treating household financial assets as a single stock variable, the analysis separates gross assets, liabilities, net financial assets, portfolio composition and annual balance-sheet changes across EU-27 countries during 2010–2024. This distinction is needed because financial sophistication, returns to wealth and household portfolio efficiency are unevenly distributed, as shown by studies on investment mistakes, financial sophistication and heterogeneous wealth returns (Calvet et al., 2009; Fagereng et al., 2020; Bach et al., 2020). The central question is not whether households hold more financial assets, but whether their financial position becomes stronger once liabilities and balance-sheet dynamics are taken into account.

The rest of the paper is organised as follows: literature review, methodology, results, discussions, and conclusions. The literature review clarifies the empirical debates on finance, household balance sheets and economic development. The methodology describes the Eurostat-based EU-27 panel, the construction of the main indicators and the econometric specification. The results section presents the evidence on financial stocks, balance-sheet changes and comparative EU patterns, while the discussions section interprets the findings against the broader finance–growth and household-finance literature. The conclusions draw the main implications of the distinction between gross financial wealth and net financial strength.

Literature review

The empirical literature on finance and development has gradually moved away from the assumption that larger financial aggregates necessarily generate stronger economic performance. Early cross-country and sectoral work linked financial depth with growth by showing that countries with more developed financial systems were better able to support sectors dependent on external finance, while later studies added concerns about causality, heterogeneity and the conditions under which finance is converted into productivity gains (De Gregorio & Guidotti, 1995; Rajan & Zingales, 1998; Luintel & Khan, 1999). This shift matters for household finance because the volume of financial assets held by households is only one part of the wider development mechanism. Financial wealth becomes economically relevant when it is associated with allocation efficiency, risk absorption and intertemporal stability rather than with balance-sheet expansion alone.

A second group of studies argues that the finance–growth relationship differs across stages of development and institutional environments. Rioja and Valev (2004) find that financial development affects the sources of growth differently across country groups, with productivity channels becoming more visible in more developed economies, while Fisman and Love (2007) reinterpret financial dependence through the ability of firms to respond to growth opportunities. Research on non-monotonic finance–growth links reaches a similar warning from another angle: additional financial depth may lose its favourable association with growth once the financial system becomes large relative to the real economy (Samargandi et al., 2015; Sahay et al., 2015). These findings weaken any direct reading of household financial assets as a simple development driver and open space for indicators that separate financial size from financial strength.

The household balance-sheet literature deepens this distinction by treating households as units whose assets and liabilities must be examined jointly. Macro-financial models of deleveraging show that debt overhang can depress demand when constrained borrowers are forced to reduce spending, while household-debt research indicates that leverage conditions monetary transmission and macroeconomic adjustment (Eggertsson & Krugman, 2012; Alpanda & Zubairy, 2019). Evidence from the Bank for International Settlements also points to a temporal asymmetry: household debt may support consumption and GDP in the short run, but higher debt ratios tend to weaken growth over longer horizons (Lombardi et al., 2017). The relevant object is therefore not the household asset stock alone, but the net position that remains once liabilities are deducted.

European evidence strengthens the case for a net-balance perspective because household financial structures differ markedly across countries. Work based on the Eurosystem Household Finance and Consumption Survey shows that euro-area households allocate wealth across real assets, deposits, risky financial assets and pension-related instruments in highly uneven ways, while financial vulnerability depends on both solvency and liquidity positions (Arrondel et al., 2016; Ampudia et al., 2016). The ECB methodological framework also confirms the value of harmonised household-level information for comparing assets, liabilities and wealth across European economies, yet country heterogeneity remains substantial even under a common statistical architecture (Household

Finance and Consumption Network, 2023). These studies support the treatment of household finance as a balance-sheet configuration rather than a single wealth aggregate.

Household portfolio research adds another layer because asset composition influences the way wealth is accumulated and transmitted. Limited stock-market participation remains a persistent empirical puzzle, and portfolio choice depends on inertia, participation costs, borrowing constraints, labour-income risk, trust and cognitive ability (Haliassos & Bertaut, 1995; Cocco et al., 2005; Guiso et al., 2008; Grinblatt et al., 2011). This literature shows that market-based household assets cannot be interpreted only through their expected returns. Participation itself is selective, and the growth relevance of household portfolios depends on who holds risky assets, how diversified those holdings are and whether households can withstand income or valuation shocks without cutting spending sharply.

The consumption channel also cautions against interpreting financial wealth as an automatic growth mechanism. Research on wealth effects finds that consumption responses differ by asset type, country setting and financial-market structure, while the marginal propensity to consume out of wealth is not uniform across economies (Slacalek, 2009). Housing and financial wealth may influence household spending, but the transmission depends on liquidity, collateral channels and the capacity to borrow against asset values. For the EU, where households differ in home ownership, pension arrangements, capital-market access and deposit preference, a gross financial asset ratio may mix several mechanisms that do not necessarily move in the same direction. The distinction between wealth level and balance-sheet improvement becomes especially relevant when annual growth is the outcome of interest.

Recent European applied research has also moved toward conditional and multi-channel explanations of macroeconomic outcomes. Studies by Hrebenciuc et al. (2025) and Cetulean et al. (2026) examine EU performance through interactions between capability, structural transformation and competitiveness, while Georgescu et al. (2025) show that digitalisation does not generate uniform environmental gains once channel configuration and energy conditions are considered. Although these contributions examine different empirical domains, they share an analytical premise that is relevant here: aggregate indicators need to be decomposed before their economic meaning becomes clear. The same logic applies to household finance, where gross assets, liabilities, net assets and annual changes may carry different relationships with development.

The gap left by the existing literature concerns the treatment of household financial wealth as a development-related balance-sheet condition in a harmonised EU-27 panel. Finance–growth studies usually focus on financial systems, credit depth or market development, while household-finance studies often rely on microdata, portfolio participation or vulnerability indicators. Fewer empirical designs connect country-level household financial assets, liabilities, net financial positions and portfolio structure to annual real GDP per capita growth across all EU member states over a recent long period. The missing distinction is not only between assets and debt, but between gross financial accumulation and net financial strengthening. This gap is addressed by testing whether economic development is associated with the size of household financial wealth or with improvements in the net financial position of the household sector.

Methodology

This study examines the relationship between household financial balance sheets and economic development in the European Union, using an econometric methodology based on country-year panel data for the EU-27 over the period 2010–2024. The data were collected from Eurostat and organised in a harmonised longitudinal structure that allows comparisons across countries and over time. The empirical processing, descriptive statistics and panel estimations were conducted in RStudio, version 2024.12.1+563. The methodological design separates gross household financial wealth from net household financial strength, since the accumulation of financial assets may coexist with higher liabilities and may not necessarily reflect a healthier household balance sheet. The main dependent variable is annual real GDP per capita growth, while complementary specifications use the logarithm of real GDP per capita and a medium-term forward growth indicator. This approach follows the broader finance-growth literature, where financial variables are treated as channels connected with allocation, investment, productivity and macroeconomic performance rather than as neutral balance-sheet aggregates (Levine, 2005).

The research question is formulated as follows:
RQ: Does household financial wealth contribute to economic development in the European Union through the size of gross financial assets or through the strengthening of net household financial positions?
Two hypotheses guide the empirical specification.
H1: Gross household financial assets are not expected to have a robust direct association with annual real GDP per capita growth once country and year fixed effects are controlled for.
H2: Improvements in net household financial assets are expected to be positively associated with real GDP per capita growth, reflecting the relevance of household balance-sheet quality for economic development.

The distinction between financial expansion and financial strength is necessary because finance can support growth when it improves allocation and resilience, but the same expansion may become less favourable when it is accompanied by debt accumulation or balance-sheet fragility (Loayza & Rancière, 2006).

The dataset is structured as a balanced conceptual panel in which i denotes the EU member state and t denotes the year. The financial variables include household gross financial assets as a percentage of GDP, household liabilities as a percentage of GDP, household net financial assets as a percentage of GDP, deposits as a share of household financial assets, equity and investment fund shares, and insurance and pension entitlements. The macroeconomic control vector includes investment as a share of GDP, inflation and unemployment, since these variables capture conditions that influence both growth and household financial behaviour.

All explanatory variables are introduced with a one-year lag in the main models, reducing the risk that contemporaneous GDP movements mechanically influence the financial indicators in the same year. The use of lagged financial and macroeconomic indicators is

consistent with empirical work that treats household financial constraints, savings behaviour and growth as temporally connected processes rather than purely contemporaneous correlations (Jappelli & Pagano, 1994).

The baseline econometric model estimates the association between lagged household gross financial assets and real GDP per capita growth through a two-way fixed-effects panel specification:

$$g_{it} = \alpha + \beta_1 FA_{i,t-1} + \boldsymbol{\gamma}' \mathbf{X}_{i,t-1} + \mu_i + \lambda_t + \varepsilon_{it}$$

where g_{it} denotes annual real GDP per capita growth, $FA_{i,t-1}$ represents lagged household gross financial assets as a percentage of GDP, $\mathbf{X}_{i,t-1}$ is the vector of lagged macroeconomic controls, μ_i captures country fixed effects, λ_t captures year fixed effects, and ε_{it} is the idiosyncratic error term. Country fixed effects absorb persistent structural differences between EU economies, while year fixed effects account for common shocks affecting all member states in a given year. Standard errors are clustered at country level, following the standard treatment of serial correlation and grouped dependence in finance-oriented panel datasets (Petersen, 2009).

A second group of models replaces gross financial assets with net household financial assets and household liabilities, allowing the empirical design to distinguish between the size of household financial balance sheets and their net strength. The corresponding equations are written as:

$$g_{it} = \alpha + \theta_1 NFA_{i,t-1} + \boldsymbol{\gamma}' \mathbf{X}_{i,t-1} + \mu_i + \lambda_t + \varepsilon_{it}$$
$$g_{it} = \alpha + \eta_1 LIAB_{i,t-1} + \boldsymbol{\gamma}' \mathbf{X}_{i,t-1} + \mu_i + \lambda_t + \varepsilon_{it}$$

where $NFA_{i,t-1}$ denotes lagged net household financial assets and $LIAB_{i,t-1}$ denotes lagged household liabilities, both expressed relative to GDP. These specifications test whether the development relevance of household finance comes from asset accumulation alone, debt exposure, or the net position obtained after liabilities are taken into account. The distinction is economically meaningful because wealth effects and macroeconomic transmission may differ depending on whether household asset growth reflects genuine net worth gains or a balance-sheet expansion accompanied by additional obligations (Carroll et al., 2011).

The central empirical specification moves from financial stocks to financial changes, since the article focuses on whether development is more closely associated with improvements in household net financial positions than with the level of gross financial wealth. The main dynamic equation is:

$$g_{it} = \alpha + \phi_1 \Delta FA_{i,t-1} + \phi_2 \Delta NFA_{i,t-1} + \phi_3 \Delta EQFUND_{i,t-1} + \boldsymbol{\gamma}' \mathbf{X}_{i,t-1} + \mu_i + \lambda_t + \varepsilon_{it}$$

where $\Delta FA_{i,t-1}$ captures the lagged change in gross household financial assets, $\Delta NFA_{i,t-1}$ captures the lagged change in net household financial assets, and $\Delta EQFUND_{i,t-1}$ captures the lagged change in the share of equity and investment funds in household portfolios. A positive and statistically significant coefficient for $\Delta NFA_{i,t-1}$, combined with a weak or negative coefficient for $\Delta FA_{i,t-1}$, would support the interpretation that economic

development is associated more closely with household net financial strengthening than with gross asset accumulation. This balance-sheet logic is consistent with evidence showing that household leverage can amplify macroeconomic vulnerability when asset growth is accompanied by debt expansion (Mian & Sufi, 2011).

Additional specifications test whether the association between household financial assets and growth differs across institutional and macro-financial settings. The interaction model is expressed as:

$$g_{it} = \alpha + \beta_1 FA_{i,t-1} + \beta_2 (FA_{i,t-1} \times Z_{it}) + \boldsymbol{\gamma}' \mathbf{X}_{i,t-1} + \mu_i + \lambda_t + \varepsilon_{it}$$

where Z_{it} is alternatively defined as a post-COVID indicator, a high-financial-depth classification, or a Central and Eastern European country dummy. These interaction terms examine whether gross household financial assets matter differently during the post-pandemic period, in economies with deeper household financial sectors, or in newer EU member states with distinct financial structures. A medium-term robustness specification uses the average forward growth rate over three years:

$$G_{it}^{(3)} = \frac{1}{3} \sum_{s=1}^{3} g_{i,t+s}$$

where $G_{it}^{(3)}$ measures the average real GDP per capita growth rate from $t+1$ to $t+3$. Since EU economies are exposed to common shocks and cross-country dependence, robustness checks may rely on covariance estimators suitable for panels with spatial and temporal dependence (Driscoll & Kraay, 1998).

The empirical interpretation remains conditional rather than causal. The two-way fixed-effects structure controls for unobserved country characteristics and common annual shocks, while lagged regressors reduce simultaneity concerns. The coefficients are interpreted as within-country associations between household financial balance-sheet indicators and subsequent economic performance, after accounting for investment, inflation, unemployment and unobserved fixed heterogeneity. The methodological contribution lies in separating gross financial wealth from net financial strength and in testing whether balance-sheet quality retains explanatory relevance when standard macroeconomic controls and fixed effects are included. This strategy is consistent with panel finance-growth research that evaluates whether financial variables remain associated with development once institutional, structural and time-specific components are absorbed by the model design (Beck et al., 2000).

Results

The empirical evidence separates household financial wealth into two dimensions with different growth relevance. The first concerns the accumulated size of household financial positions, captured by gross financial assets, liabilities, net financial assets and portfolio shares. The second concerns annual balance-sheet improvement, captured by changes in gross and net household financial assets. The fixed-effects estimates point to a weak

relationship between financial stocks and annual real GDP per capita growth, while the strongest statistical pattern appears when household net financial positions improve from one year to the next.

Figure 1. *Gross Household Financial Wealth versus Net Financial Strength*

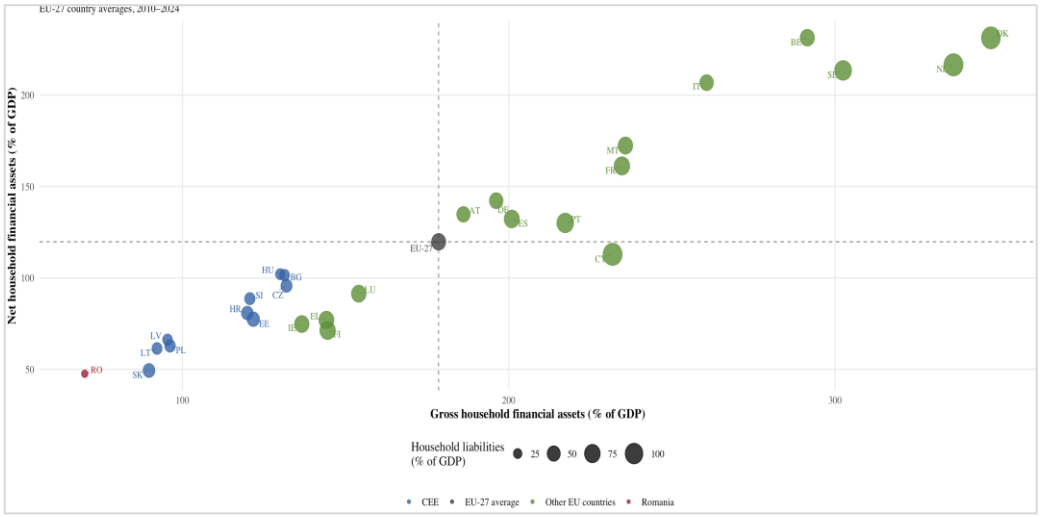


Figure 1 places EU-27 economies according to average gross household financial assets and average net household financial assets over 2010–2024, with point size reflecting household liabilities. The distance between countries is wide. Denmark is positioned close to 350% of GDP in gross household financial assets and above 230% of GDP in net financial assets, while the Netherlands and Sweden also occupy the upper-right part of the distribution, with gross positions around or above 300% of GDP and net positions above 210% of GDP. Romania remains near the lower-left area, with gross household financial assets below 80% of GDP and net financial assets close to 50% of GDP. The EU-27 average stands around 180% of GDP for gross household financial assets and about 120% of GDP for net household financial assets.

The cross-country configuration confirms that gross household financial wealth and net financial strength cannot be treated as equivalent. The vertical distance between gross and net positions reflects the relevance of household liabilities, which alter the interpretation of financial depth. Some economies appear financially large when gross assets are considered, yet their net position depends on the debt accumulated by the household sector. This separation justifies the econometric distinction between assets, liabilities and net assets, rather than reducing household finance to a single aggregate wealth measure.

Table 1 reports the baseline fixed-effects estimates for household financial stocks, portfolio structure and annual real GDP per capita growth. Lagged gross household financial assets have a coefficient of -0.0061, with a clustered standard error of 0.0160, without statistical support. Lagged net household financial assets also remain statistically weak, with a coefficient of -0.0027 and a standard error of 0.0144. Household liabilities enter with a

negative coefficient of -0.0132, but the estimate is not statistically different from zero. The first set of results gives no robust evidence that the level of household financial assets or liabilities explains annual growth after country and year fixed effects are included.

Table 1. *Baseline fixed-effects estimates for household financial stocks, portfolio structure and GDP per capita growth*

Variables	Gross assets	Net assets	Assets and liabilities	Portfolio structure
Lagged gross financial assets	-0.0061 (0.0160)	-	-0.0029 (0.0141)	-
Lagged net financial assets	-	-0.0027 (0.0144)	-	-
Lagged household liabilities	-	-	-0.0132 (0.0287)	-
Lagged deposits share	-	-	-	-0.1356 (0.1309)
Lagged equity and investment funds share	-	-	-	-0.0620 (0.0874)
Lagged insurance and pension entitlements share	-	-	-	0.0117 (0.0803)
Lagged investment	0.1214 (0.0884)	0.1264 (0.0854)	0.1081 (0.1146)	0.1269 (0.0878)
Lagged inflation	-0.3157** (0.1090)	-0.3231* (0.1164)	-0.3125** (0.1038)	-0.3445** (0.1140)
Lagged unemployment	0.1558. (0.0887)	0.1426. (0.0772)	0.1693. (0.0936)	0.1931* (0.0911)
R^2	0.6497	0.6491	0.6503	0.6570
Within R^2	0.0735	0.0720	0.0751	0.0929

Notes: The dependent variable is annual real GDP per capita growth. All specifications include country and year fixed effects. Standard errors clustered by country are reported in parentheses.

Significance levels: *** p < 0.001; ** p < 0.01; * p < 0.05; . p < 0.10.

Portfolio composition does not change this empirical pattern. The deposits share records a coefficient of -0.1356, the equity and investment funds share records -0.0620, and insurance and pension entitlements record 0.0117, all without statistical support. Annual growth is not robustly associated with whether household portfolios are more liquid, more market-oriented or more concentrated in long-term financial entitlements. Among the controls, inflation has the most stable coefficient, remaining negative and statistically supported across the baseline specifications, with values between -0.3125 and -0.3445 in three models. Investment is positive but statistically weak in the stock specifications, while unemployment is positive and only marginally supported.

Table 2 moves the estimation from financial stocks to annual balance-sheet changes. Lagged change in gross household financial assets is negative and highly statistically supported, with a coefficient of -0.1932 and a standard error of 0.0467. Lagged change in net household financial assets is positive and highly statistically supported, with a coefficient of 0.2238 and a standard error of 0.0509. The two estimates move in opposite directions, which gives the main result its empirical force. Growth is not stronger when household financial assets expand in gross terms alone; it is stronger when the household sector improves its net financial position.

Table 2. *Financial balance-sheet changes and GDP per capita growth*

Variables	Financial changes
Lagged change in gross financial assets	-0.1932*** (0.0467)
Lagged change in net financial assets	0.2238*** (0.0509)
Lagged change in equity and investment funds share	-0.1031. (0.0504)
Lagged investment	0.1285* (0.0517)
Lagged inflation	-0.2775** (0.0811)
Lagged unemployment	-0.0025 (0.0693)
R^2	0.6963
Within R^2	0.1281

Notes: The dependent variable is annual real GDP per capita growth. The specification includes country and year fixed effects. Standard errors clustered by country are reported in parentheses.

Significance levels: *** p < 0.001; ** p < 0.01; * p < 0.05; . p < 0.10.

The remaining estimates in the financial-change model preserve the same interpretation. The lagged change in the equity and investment funds share is negative and only weakly supported, at -0.1031, which leaves portfolio reallocation outside the main empirical channel. Lagged investment is positive and statistically supported at the 5% level, with a coefficient of 0.1285, while lagged inflation is negative and statistically supported at the 1% level, with a coefficient of -0.2775. Lagged unemployment becomes statistically weak, with a coefficient close to zero, at -0.0025. The model records an R^2 of 0.6963 and a within R^2 of 0.1281, above the within explanatory power of the baseline stock specifications.

Figure 2. *Net Financial Strengthening and GDP per Capita Growth*

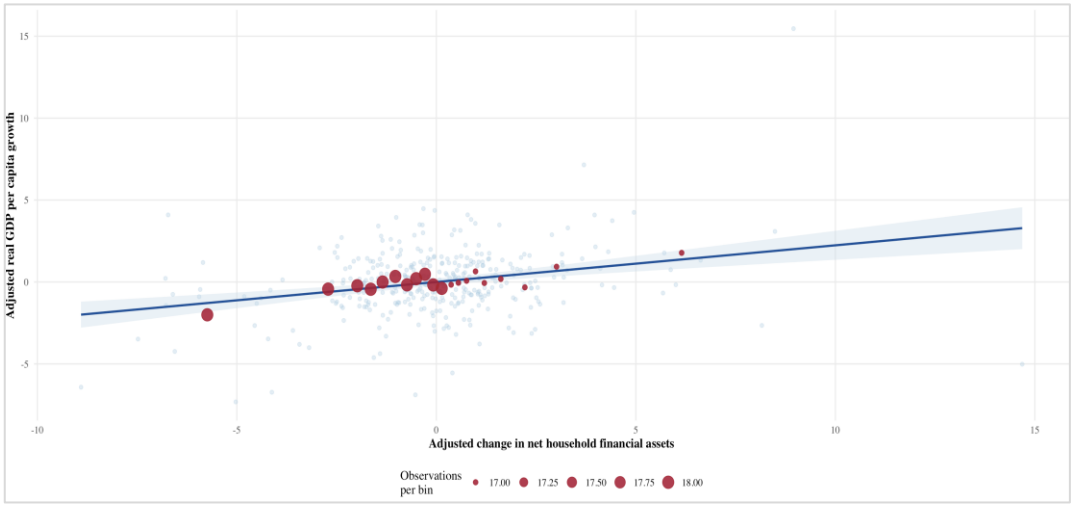
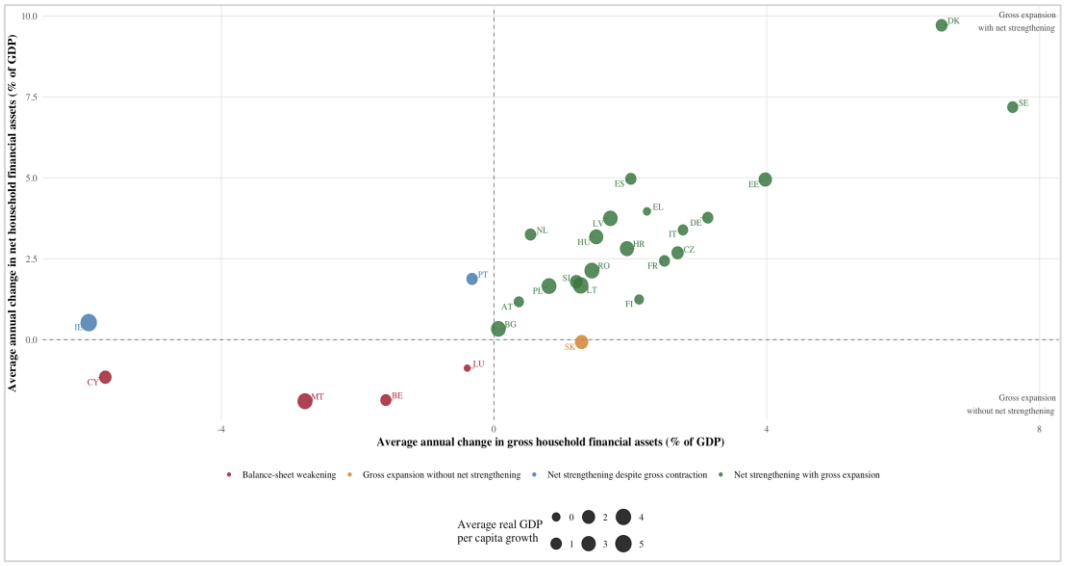


Figure 2 provides a fixed-effects adjusted representation of the relationship between lagged changes in net household financial assets and annual real GDP per capita growth. The fitted line has a positive slope, moving from negative adjusted growth values at lower adjusted

net-financial changes to positive adjusted growth values at higher values of the same variable. Most binned observations are concentrated around the central interval between roughly -2 and 1 on the horizontal axis, while several observations extend beyond 10. The dispersion remains visible, yet the upward slope is consistent with the positive and highly supported coefficient estimated for lagged changes in net household financial assets.

Figure 3 positions EU economies by average annual changes in gross and net household financial assets. Most countries are placed in the upper-right quadrant, where gross financial expansion is accompanied by net strengthening. Denmark records one of the strongest positions, with average annual gross financial asset growth close to 8% of GDP and net asset improvement near 10% of GDP, while Sweden also combines gross expansion above 7% of GDP with net strengthening above 7% of GDP. Romania is located in the same favourable quadrant, with positive average annual changes in both gross and net household financial assets, although from a much lower level of financial depth. Malta, Belgium, Cyprus and Luxembourg occupy weaker areas, where the average net household position deteriorates.

Figure 3. *Balance-Sheet Quality Typology of EU Economies*



The results support a sharper interpretation of household finance than a simple wealth-size argument. Gross household financial assets are clearly visible in the European descriptive landscape, but their level does not carry a robust association with annual growth in the fixed-effects models. Portfolio shares do not provide a stable alternative channel, and liabilities do not become statistically decisive in the stock specifications. The strongest signal belongs to annual improvements in net household financial assets. Economic development in the EU-27 is closer to household balance-sheet quality than to the accumulated volume of gross financial wealth, because the development relevance of household finance depends on what remains after liabilities are taken into account.

Discussions

The empirical results place household finance in a balance-sheet framework rather than a simple wealth-size framework. Gross household financial assets vary substantially across EU-27 economies, yet their level does not retain a robust association with annual real GDP per capita growth once country and year effects are controlled for. The strongest evidence appears when the estimations move from stocks to annual changes, where net household financial strengthening becomes positive and highly significant. This pattern fits the more conditional strand of finance–growth research, which treats finance as growth-relevant only when it improves allocation, resilience and productive capacity, rather than when it expands as an aggregate volume detached from real-sector transmission (Levine, 2005; Loayza & Rancière, 2006; Arcand et al., 2015).

H1 is supported by the baseline estimates, since lagged gross household financial assets do not show a statistically robust relationship with annual real GDP per capita growth. The coefficient of -0.0061, with a clustered standard error of 0.0160, remains statistically weak, and the same absence of support appears when net financial assets, liabilities and portfolio shares are introduced as stock variables. This result is consistent with the argument that financial depth and financial size do not automatically translate into stronger economic performance. Beck et al. (2014) distinguish between the size and function of finance, while Rousseau and Wachtel (2011) document the weakening of the finance–growth relationship in later samples. In the EU-27 setting, household financial assets in levels seem closer to historically accumulated financial depth, pension arrangements, valuation effects and institutional structures than to a direct driver of year-to-year growth.

H2 receives stronger support because lagged changes in net household financial assets are positive and highly significant in the financial-change model. The coefficient of 0.2238, with a standard error of 0.0509, contrasts with the negative and significant coefficient of -0.1932 estimated for lagged changes in gross financial assets. This contrast gives the main empirical finding its economic meaning. Growth is not associated with gross household asset expansion as such, but with the improvement of the net financial position after liabilities are taken into account. The result aligns with household balance-sheet research showing that debt exposure changes the macroeconomic consequences of asset accumulation, especially through consumption, deleveraging and vulnerability channels (Eggertsson & Krugman, 2012; Mian et al., 2013; Mian et al., 2017).

The weak role of portfolio composition narrows the interpretation. Deposits, equity and investment funds, and insurance and pension entitlements do not carry statistically robust associations with annual real GDP per capita growth in the baseline fixed-effects models. This does not reduce the relevance of portfolio choice for household welfare, returns or financial sophistication, but it limits the case for treating aggregate portfolio shares as direct short-run growth channels. Earlier household-finance research shows that stock-market participation, diversification and financial sophistication are unevenly distributed across households and countries, which makes aggregate portfolio indicators difficult to connect mechanically with macroeconomic outcomes (Haliassos & Bertaut, 1995; Guiso et al., 2008; Calvet et al., 2009; van Rooij et al., 2011). The EU-27 evidence is more coherent with a net-strength mechanism than with a portfolio-composition mechanism.

Several limitations condition the interpretation of the results. The estimations rely on country-level annual data, which means that household heterogeneity by income, age, education, financial literacy or asset ownership cannot be directly examined. The models also identify within-country associations rather than structural causal effects, even though lagged regressors, country fixed effects and year fixed effects reduce simultaneity and omitted heterogeneity concerns. Household financial assets and liabilities are measured as ratios to GDP, which is appropriate for macroeconomic comparability, but this scaling may also reflect changes in the denominator during periods of unusual growth, inflation or crisis adjustment. Wealth effects are known to differ by asset type, liquidity and household constraints, so aggregate annual indicators cannot fully capture the microeconomic mechanisms through which household balance sheets influence spending and resilience (Carroll et al., 2011; Case et al., 2005; Slacalek, 2009).

Conclusions

Household financial wealth in the European Union cannot be interpreted convincingly through its gross volume alone. The empirical evidence indicates that large household asset positions capture financial depth, institutional history and accumulated saving capacity, but they do not translate into a stable association with annual real GDP per capita growth. The visible size of household financial assets therefore offers an incomplete view of economic strength, especially when liabilities are left outside the interpretation.

The distinction between gross financial assets and net household financial strength gives the evidence a sharper economic meaning. Gross wealth describes the asset side of the household sector, while the net position reflects the part of that wealth that remains after debt is deducted. The strongest empirical signal appears precisely in this second dimension, where improvements in net household financial assets are positively associated with growth. The development relevance of household finance is therefore connected less with accumulation as such and more with the consolidation of the household balance sheet.

The weak role of portfolio shares further narrows the interpretation. Deposits, equity and investment funds, insurance and pension entitlements remain important for household welfare, long-term saving and risk exposure, yet they do not provide a stable growth-related channel in the fixed-effects estimates. The results point instead to a broader balance-sheet condition, in which the relation between assets and liabilities matters more than the internal composition of gross financial holdings.

The main message is that financial wealth becomes economically meaningful when it improves resilience rather than merely expanding balance-sheet size. A household sector may hold more financial assets and still remain fragile if liabilities rise in parallel or if asset growth fails to improve the net position. Across the EU-27, the more relevant development signal is not how large household financial wealth appears on the asset side, but whether households become financially stronger after debt is taken into account.

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