

How much is home worth? Subjective housing wealth and life satisfaction in Germany

Wie viel ist mein Eigenheim wert? Subjektives Wohnvermögen und Lebenszufriedenheit in Deutschland

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Abstract:

In recent years, wealth, and particularly housing wealth, has gained attention as both a driver of well-being and a source of rising inequality. However, unlike income, wealth is more difficult to evaluate, and individuals often rely on subjective assessments that may diverge from market values. This suggests that housing prices may matter less for life satisfaction than expected because homeowners often perceive price changes only when they actually sell or buy a home. To study the effect of perceived housing wealth on individual life satisfaction, we use longitudinal data from the German Socio-Economic Panel (SOEP, 2002-2019) and apply two-way fixed-effects regression analyses. Our results show that increases in reported housing wealth, even in the absence of transactions (i.e., among non-moving homeowners, controlling for size and quality of housing), are associated with increases in life satisfaction. These findings indicate that perceived unrealized housing wealth can influence individuals’ life satisfaction. This points to broader implications for social inequality suggesting that rising property values can widen social disparities in life satisfaction even if individuals’ living conditions remain unchanged.

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1 Introduction

Subjective life satisfaction¹ is unequally distributed both among individuals and across societies. Over the years, an extensive body of research has examined the factors that explain these differences at both the micro and macro levels. At the heart of this research lies the debate over the extent to which money can “buy” happiness. A consistent finding is that income has a generally positive effect on life satisfaction, although the strength of this effect tends to diminish as income increases (Diener and Oishi, 2000; Wolbring, Keuschnigg and Negele, 2013; Haddad *et al.*, 2022; Akkiraju and Rao, 2025). This finding underscores the crucial importance of a stable material basis as a foundation for happiness.

Recently, better data availability and an increasing awareness of high and rising levels of wealth inequality (Killewald, Pfeffer and Schachner, 2017; Pfeffer and Waitkus, 2021; Chancel *et al.*, 2022; Piketty, Saez and Zucman, 2023), have placed individual and household wealth at the centre of ongoing debates on economic inequality and its consequences for individual life satisfaction. While research on the role of wealth in shaping life satisfaction, beyond the well-established effects of income, is still at an early stage, most empirical studies conclude that net wealth is positively associated with life satisfaction (Zumbro, 2014; Clapham, Foye and Christian, 2018; Jantsch and Veenhoven, 2019; Atalay and Edwards, 2022; Jantsch, Le Blanc and Schmidt, 2022, 2024; Kasinger *et al.*, 2023).

A crucial factor in the link between wealth and life satisfaction is housing wealth as it constitutes the largest and often only substantively relevant asset for many individuals (Hadziabdic and Kohl, 2021). Housing therefore plays a central role in shaping both the distribution of wealth and its impact on well-being. This role becomes especially salient in times of high inflation, when rising rents and house prices can exacerbate existing wealth inequalities and, in turn, potentially widen the gap in life satisfaction between the rich and the poor.

From a theoretical perspective, housing wealth should affect life satisfaction in two main ways: directly, through the comfort, stability, and social standing that quality housing provides, and indirectly, by its insurance function as it serves as a financial safety net that helps buffer individuals against future risks and creates opportunities for the future (Kemeny, 1981). Similar to the relationship between income and life satisfaction, part of the effect of wealth is also likely to arise from changes in relative standing rather than from changes in absolute wealth levels (Ferrer-i-Carbonell, 2005; Luttmer, 2005; Rojas, 2019).

Wealth differs from income in that it represents an accumulated stock spread across various assets with uncertain or infrequently updated market values, making it more difficult for

¹ We use the terms ‘life satisfaction’, ‘subjective well-being’, and ‘happiness’ interchangeably here. The literature generally considers that subjective well-being comprises two distinct dimensions: an evaluative component of subjective well-being, captured by measures of life satisfaction, and an affective component, reflected in emotional experiences such as happiness. Empirically, these two dimensions highly correlate (Diener, 1984).

individuals to accurately assess their current level of wealth. This is particularly true for housing wealth as most individuals rarely move. This lack of transparency implies that individuals may misestimate their own wealth, a pattern commonly observed in empirical studies comparing homeowners' self-assessments with objective sale prices (Goodman and Ittner, 1992; Kiel and Zabel, 1999; Anenberg, 2016; Dreesen and Damen, 2023; Naidin, Waltl and Ziegelmeyer, 2025). Because real estate in general, and owner-occupied housing real estate in particular, is highly illiquid, changes in market prices might not influence an individual's self-assessed house value. From this perspective, homeowners might appear immune to large increases in market prices, as these gains are not realized.² However, contrary to this argument, empirical research on house price fluctuations shows that homeowners do respond to changes in market level house prices, for instance by adapting their consumption, even when they do not intend to sell their homes (Mian, Rao and Sufi, 2013; Bailey *et al.*, 2018; Berger *et al.*, 2018; Zhang *et al.*, 2019; De Stefani, 2021; Gohl *et al.*, 2024). These findings suggest that individuals are sensitive to changes in their assets' values, implying that (market-induced) shifts in self-assessed housing wealth may influence life satisfaction even though owner-occupied housing is rarely bought or sold.

Building on this idea, this study investigates whether feeling relatively richer or poorer as a result of changes in perceived housing values has a direct effect on individual well-being. Methodologically, measuring these effects is challenging as much of the existing research examines changes in objective transaction-based housing prices at the aggregate level – such as regional or national trends – overlooking the importance of individual experiences of housing wealth. To address this limitation, we analyse changes in perceived market values of individuals who remain in the same home over the observation period. By focusing exclusively on non-moving homeowners and controlling for changes in the size and the subjective quality of their housing units, we isolate the impact of subjective changes in asset values that are not realized through transactions or additional investments. The main hypothesis guiding this research is that individuals who perceive an increase (decrease) in their home's market value will report higher (lower) life satisfaction, even when living conditions remain unchanged.

To test this hypothesis, we use individual-level data from the German Socio-Economic Panel (SOEP), which collected information on perceived housing assets in 2002, 2007, 2012, 2017, and 2019. We estimate both pooled ordinary least squares and two-way fixed-effects models to study the effects of levels and changes in perceived housing wealth on life satisfaction. Our findings indicate that homeowners who report increases in housing wealth also tend to report higher life satisfaction and vice versa. Furthermore, we find that self-assessed housing wealth is positively associated with life satisfaction even in the absence of transactions, renovations, or subjective changes in housing conditions. Overall, the findings indicate that subjective well-being responds to perceived gains and losses in housing wealth, even if these gains and losses are not realized.

² On the importance and definition of realised and unrealised capital gains, see also the heated debates in the context of newly proposed taxes during the 2024 US election (Saul, 2024).

The following chapters first present the theoretical motivation and review the relevant literature on perceived housing wealth and life satisfaction. We then describe the data, research design, and estimation strategy and present our results. Finally, we conclude by discussing the implications of the study for understanding the role of housing wealth perceptions in shaping individual well-being.

2 Literature and Theory

2.1 Linking housing wealth and life satisfaction

Although extensive research has examined the relationship between income and life satisfaction, generally finding a positive effect that diminishes at higher income levels (Oishi, Kesebir and Diener, 2011; Wolbring, Keuschnigg and Negele, 2013; Oishi *et al.*, 2022; Killingsworth, Kahneman and Mellers, 2023; Akkiraju and Rao, 2025), comparatively less work has investigated the question how wealth relates to life satisfaction.

Wealth is conceptually distinct from income. While income reflects financial flows such as labour earnings, capital income, or government transfers, wealth encompasses accumulated assets, savings, and debts, providing a broader picture of an individual's financial situation. Empirically, Jantsch, Le Blanc and Schmidt (2022) show that net household wealth matters for subjective well-being beyond the effects of income in Germany. This positive relationship between levels or changes in wealth and life satisfaction has also been documented in other studies (D'Ambrosio, Frick and Jäntti, 2009; Halbmeier and Grabka, 2019; Brzezinski, 2025). Capturing intra-household dynamics, Kapelle and co-Authors (2022) show that increases in jointly held wealth are associated with increases in spouses' life satisfaction in Germany, independent of their gender. Focusing specifically on housing wealth, Zumbro (2014) finds that homeownership in Germany is positively associated with subjective well-being and that this relationship is conditioned by factors such as property quality, local context, and financial burden.

The literature linking housing wealth and life satisfaction differentiates between two broad types of explanations for the empirical finding that housing wealth is positively associated with life satisfaction. First, housing wealth may have a direct effect on life satisfaction by increasing material comfort, providing stability, and shaping individuals' identity and social standing. For instance, housing wealth can enhance feelings of belonging to a neighbourhood group (McCabe, 2013). In this way, the economic capital embodied in housing wealth can be leveraged to foster social capital by building and reinforcing social networks through neighbourhood formation and community engagement, thereby strengthening individuals' social standing and potentially their life satisfaction. Furthermore, perceived increases in housing wealth may also make existing debt burdens feel more manageable and thereby increase homeowners' life satisfaction. Second, housing wealth has an indirect effect on life satisfaction as it offers a form of financial insurance or security that mitigates future risks (Kemeny, 1981; Zumbro, 2014; Adler and Ansell, 2020). This mechanism has also been

described as a buffer effect, emphasizing wealth's capacity to stabilize consumption during periods of economic insecurity (Skopek, Buchholz and Blossfeld, 2014; Brulé and Suter, 2019; Kuhn and Brulé, 2019; Rodems and Pfeffer, 2021). Housing wealth can therefore affect life satisfaction both directly, through housing comfort, and indirectly, through its insurance and status function.

Both direct and indirect effects likely shape life satisfaction, not only through absolute changes in comfort, status, and security, but also through objective and subjective changes in one's relative standing with respect to these characteristics. According to social comparison theories, individuals evaluate their well-being by referencing past financial positions or by comparing themselves to others (e.g., Schneider, 2019). Housing wealth can therefore also affect life satisfaction by shaping individuals' perceptions of social status and relative wealth through social comparisons with relevant others (Luttmer, 2005).

Building on these direct and indirect (relative and absolute) mechanisms, it is not (only) homeownership that shapes life satisfaction, but rather the level of housing wealth that reinforces these effects. Greater housing wealth can directly improve living comfort, housing quality, and increase individuals' perceptions of social status, while it also increases its ability to buffer against future risk. That is, the level of housing wealth, rather than merely owning a home, likely affects life satisfaction. As a consequence, polarising housing price developments between regions (Baldenius, Kohl and Schularick, 2020; Howard and Liebersohn, 2025) are likely to generate differences in life satisfaction and other (political) attitudes not only between tenants and owners, but also within the group of owners (Ansell and Adler, 2019; Ansell *et al.*, 2021).

2.2 Perceived housing wealth and life satisfaction

To understand how (changes in) housing wealth affect individual life satisfaction, it is crucial to consider not only objective changes in price levels, usually measured based on transaction-based data, but also individual perceptions of housing wealth. A growing literature on subjective perceptions of income and wealth shows, that self-assessed levels of income and wealth positions are crucial for individuals' attitudes and preferences, such as preferences towards redistribution or taxation (Karadja, Mollerstrom and Seim, 2017; Bublitz, 2022; Kalleitner and Bobzien, 2024) and life satisfaction (Schneider, 2019; Ren *et al.*, 2022). Applying these insights to the context of housing markets, subjective market valuations, and thus subjectively perceived house prices, may be essential to understand the relationship between housing wealth and life satisfaction, as perceived house prices are better suited to capture the indirect social mechanisms linking housing wealth to life satisfaction via perceived feelings of financial security, perceived borrowing constraints, and relative status assessments.

This is particularly relevant because housing wealth can be over- or underestimated, as wealth assessments are inherently complex. We therefore argue that such potentially biased self-assessments of housing wealth matter for life satisfaction. Perceived housing wealth can affect

how ‘rich’ or ‘poor’ individuals feel, and such feelings can, in turn, affect life satisfaction. The core idea is that feeling wealthier due to higher perceived housing wealth provides a sense of security and economic advantage, regardless of whether such feelings can be realised in actual transactional gains. Hence, while perceived wealth might be considered a proxy for individuals who are well informed about market values, it may be a better predictor of life satisfaction among those whose perceptions fail to capture actual market dynamics. For these individuals, accurate market dynamics may have little or no influence on life satisfaction. Therefore, by focusing on perceived housing wealth, we do not claim that perceptions are unrelated to actual price changes; rather, we argue that perceived changes in housing wealth should predict individuals’ life satisfaction regardless of whether these perceptions are accurate.

There are different methodological approaches to measuring (housing) wealth. One approach relies on market-based and administrative data, such as databases containing actual sales prices, property characteristics, and other relevant real-estate indicators (Breidenbach and Schaffner, 2020). In addition, administrative registers or tax authorities also sometimes provide official property or land registry data, including recorded transaction prices or officially assessed values. A second, and more common, approach is based on survey data. Households and/or individuals take part in large-scale social science surveys such as the SOEP (Socio-Economic Panel) or the Household Finance and Consumption Survey (HFCS), where they report the (market) value they attribute to their assets such as their residential property as well as any outstanding mortgage debt. In a typical survey situation, one respondent per household provides information on household wealth. Net wealth is then derived by summing the reported values of different asset components and subtracting debts. Such survey-based measures thus reflect the subjectively perceived market value of household assets. As a result, reported values may diverge from actual market values: individuals might report different values even when the market value has not changed, or they might report unchanged values despite actual changes in market values. In the case of housing wealth, different data sources capture different segments of the housing market. Transaction-based measures rely exclusively on observed sales and therefore reflect the prices of properties that actually change ownership within a given period. As a result, they are inherently selective and may overrepresent certain types of locations or households that are more likely to transact in a given period. In contrast, survey-based measures aim to capture the housing wealth of the entire homeowner population, including households that do not engage in market transactions and thus have no recently observed market price. That is, survey-based housing wealth measures include self-assessed, perceived evaluations.

Substantial misperception of self-assessed wealth is likely, as wealth is often difficult for individuals to evaluate. Unlike income, which is typically received regularly, well-documented, and thus directly observable, wealth represents a stock that is accumulated and distributed across multiple assets, such as real estate, savings, and investments, over time. In addition, assets are often held over a long period of time so that the market values for individuals are much less transparent. This is particularly true for real estate and especially for owner occupied housing which may have been built or inherited without any external, market-based assessment of its market value. As a result, many individuals may form only vague or

biased perceptions of their wealth (Johansson-Tormod and Klevmarken, 2022). Such misestimation might be especially pronounced for housing assets, given the infrequency of market transactions. Consistent with this expectation, empirical research shows that survey respondents often refuse to report wealth information altogether (Schröder *et al.*, 2020), or provide substantially biased estimates (Naidin, Walzl and Ziegelmeier, 2025). Consequently, individuals appear to have even greater difficulty placing themselves within the wealth distribution than within the income distribution (Fessler and Rapp, 2023). Our focus on perceived housing wealth thus reflects an important behavioural mechanism: individuals respond to the wealth they think they hold, regardless of whether those wealth values are fully accurate or realised. Given these perception biases, one could assume that homeowners mainly adapt their perceived wealth if they move and sell or buy a new house, invest in their house, or experience some positive or negative external shocks (fire, flood, neighbourhood effects such as new infrastructure etc.). If this were true, even large increases in house prices in the market or changes in housing price inequality across regions may have limited consequences for individual life satisfaction because a substantial share of homeowners do not feel these ‘unrealized’ changes in the value of their own home.

Contrary to this expectation, a large body of research on economic behaviour shows that changes in house prices affect individuals’ economic decisions even when they have no intention of selling their homes. This suggests that while individuals may struggle to accurately estimate the value of their home (Goodman and Ittner, 1992; Kiel and Zabel, 1999; Naidin, Walzl and Ziegelmeier, 2025), they are nonetheless able to perceive market level trends and react to them (Anenberg, 2016; Gohl *et al.*, 2024; Naidin, Walzl and Ziegelmeier, 2025). Evidence from Atalay and Edwards (2022) indicates that, in Australia, exogenous increases in local house prices improve subjective financial well-being, especially for homeowners. Similarly, Zhang *et al.*, (2019), using Dutch administrative data, demonstrate that rising house prices are associated with higher household consumption among homeowners; especially among those facing borrowing constraints. These findings highlight that perceived changes in housing wealth (especially in the context of credit constraints) affect homeowners’ spending more than that of renters. De Stefani (2021) further examines how subjective expectations shape both personal and social beliefs about housing as an investment. She shows that biased beliefs (e.g. over-optimism) increase both leverage and risk-taking, reflecting changes in individual financial risk perceptions. Taken together, these results suggest that individuals’ beliefs about their housing value reacts to changing market prices and that they adapt their beliefs and behaviour accordingly. This way increases in market level housing inequality may contribute to increasing the gap in subjective well-being between the rich and the poor, even when properties do not change hand.

Our study advances this field by connecting research on changing market values and economic behaviour with literature on wealth and life satisfaction. Specifically, we examine how perceived changes in market values influence individuals’ life satisfaction.

2.3 Hypotheses

Past research finds a positive relationship between wealth and life satisfaction, positioning wealth as a key resource for material comfort, insurance against risks, and shaping one's social identity and perceived status. Unlike income, which represents immediate, regularly observed financial flows, wealth encompasses the breadth of assets and debts, and thus offers a more holistic measure of an individual's economic position. The literature thus concludes that wealth, in particular housing wealth, matters above and beyond income, both by directly improving living standards and by providing security and status. In line with past research, we thus hypothesize:

H1: Increases (Decreases) in perceived housing wealth are positively (negatively) associated with life satisfaction.

Focusing on subjective assessments of housing wealth includes a methodological specificity: unlike regular income, wealth, especially in the form of real estate, is more difficult for individuals to evaluate due to infrequent market transactions and limited information. However, research demonstrates that subjective changes in perceived housing wealth can affect consumption patterns and financial attitudes, especially among homeowners (Atalay & Edwards, 2022; Zhang et al., 2019; De Stefani, 2021). Consequently, losses or gains in perceived housing wealth among non-moving homeowners likely influences well-being, as individuals feel these subjective shifts. This can be true even if homeowners have no intention of selling their home and perceived financial gains remain unrealised. For these individuals, changes in reported housing wealth are not tied to an immediate financial gain, but rather to their beliefs about their financial position and economic security. Accordingly, we hypothesize that perceived increases in housing wealth – independent of changes in residence, investments (e.g., renovations), or perceived improvements in housing quality – will be associated with higher life satisfaction.

H2: Increases (Decreases) in perceived housing wealth are positively (negatively) associated with life satisfaction – even when individuals do not invest in their homes, move, or think that their living condition changed.

3 Method and Data

To study the effects of subjective housing wealth on individuals' life satisfaction, we use data from the German Socio-Economic Panel (SOEP) (Socio-Economic Panel 2023). Variables on household wealth were sampled every five years starting in 2002 with an irregular final sample in 2019. We therefore restrict our analysis to the following years: 2002, 2007, 2012, 2017, and 2019.

Sample. As recommended for studies aiming to uncover causal relationships using panel regressions (Wolf and Best, 2013), we carefully construct our target sample in line with the theoretical foundations of the specific hypotheses. Hypothesis 1 (H1) expects that increases in the self-evaluated wealth of owner-occupied property leads to higher personal life satisfaction. To examine this, we restrict the sample to private households who own their dwelling. In addition, we exclude person-years following a change in household identification during the observation period (e.g., due to individuals moving to another household). Hypothesis 2 (H2) proposes that market-induced changes in the evaluated housing wealth increase life satisfaction, reflecting both the insurance function of wealth and its likely role in shaping relative status. To test this, we argue that increases in evaluated wealth, independent of changes in residence, investments (e.g., renovations), or perceived improvements in housing quality, should still enhance life satisfaction. Accordingly, the target sample for H2 additionally excludes all person-years after a household has moved into a new dwelling for the first time during the observation period. This approach also avoids picking up unobserved effects related to the process of moving itself that could bias our estimates. We apply listwise deletion of missing values in both samples. Descriptive statistics on the resulting sample size and the distribution of individuals across survey waves are reported in Appendix A.

Variables of Interest

Dependent variable: Life satisfaction. We measure life satisfaction with the following item: ‘Now we would like to ask you about your satisfaction with your life in general. How satisfied are you with your life, all things considered?’ Response options range from 0 – Completely dissatisfied to 10 – Completely satisfied. Although life satisfaction scales show relatively high validity and reliability, they can be influenced by question order or mode of presentation (Diener, Inglehart and Tay, 2013). However, because question order as well as item presentation are quite stable within the different SOEP questionnaires across the years, our longitudinal analyses including individual fixed effects should cancel out these biases. Following prior research, we treat the life satisfaction scale as approximately metric (Ferrer-i-Carbonell and Frijters, 2004; Wu and Leung, 2017).

Independent variable: Housing wealth. The SOEP collects wealth information at the individual level. Each household member is asked to report the total value of owner-occupied property in Euros as well as their personal share of the property. Until 2017, the SOEP provided edited variables that had been checked for consistency and imputed using various strategies to reduce nonresponse. These edited values are not available for 2019. Therefore, we calculate household property values based on the raw responses, applying consistency checks and logical imputations (primarily imputing information reported by other household members) as outlined in the SOEP documentation (Grabka and Westermeier, 2015, p-7-8). The resulting variables closely resemble the SOEP-provided values (see also Figure 2 in the Results section) while avoiding regression-based imputations that rely on strong assumptions about the nonresponse

mechanism (e.g., missing at random). This approach also avoids potential downward biases due to multiple imputations because households with no clear perception of their housing wealth would be assigned a quasi-objective wealth value. For robustness, we also replicate our analyses using the SOEP-provided wealth indicators, excluding the 2019 data. Results reported in Appendix, table C1 (model 1) indicate that our results are nearly identical if we use the same sample of respondents but rely on the wealth indicators of the SOEP.³ All wealth and income variables were log-transformed to improve their distributional properties, reduce the influence of extreme values, and account for the likely curvilinear relationship with the outcome variable. Wealth indicators reflect changes in nominal wealth to avoid the assumption that people implicitly account for inflation. Additional analyses provided in Appendix B using deflated wealth indicators produce nearly identical results compared to our main model using nominal wealth.

Controls. We further control for likely confounders, including log-transformed household income, the number of household members, and the number of children living in the household.⁴ In addition, we include controls for age (modelled as a second-order polynomial), as well as dummies for respondents' birth cohort, marital status, employment status, and region (federal state) [control set A]. Additional models also control for the size of the respondents' housing unit in square meters, their subjective evaluation of the overall condition of the housing unit, and whether they are worried about the general economic development in Germany. Housing condition was measured using a four-point scale with the following categories: "In good condition", "In need of some renovations", "In need of full renovations", and "Dilapidated". Respondents' perceptions about the performance of the German economy were measured on a three-point scale ranging from "Not concerned at all" to "Very concerned". Finally, we use SOEP-provided wealth variables, including the remaining mortgage on respondents' owner-occupied housing property, total gross wealth, and total debt excluding housing wealth. Wealth measures include other real estate, financial assets, private insurances, business assets, and tangible assets, while total debt covers debts on other properties and consumer credits (see Grabka and Westermeier, 2015 for details).

³ When relying on the larger sample of individuals whose wealth values were estimated via multiple imputation, the estimated housing wealth effect is substantially biased downward, although it remains statistically significant and points in the same direction (see Appendix, Table C1, Model 2). Additional analyses reported in Appendix Table C2 indicate that individuals with imputed values have lower incomes, lower estimated housing wealth, a lower estimated share of household wealth, and are more likely to be widowed. These findings further suggest that missing values are not random but instead characterize individuals who have difficulty accurately assessing the value of their owner-occupied property. This, in turn, indicates that substantive relationships between (perceived) housing wealth and life satisfaction are more likely if individuals are able to form clear perceptions of their housing wealth.

⁴ Results remain robust when we restrict the sample to individuals without children in their household, suggesting that the observed effect does not primarily stem from increased comfort associated with providing for children in the future (see Appendix table E1, models 3 and 4).

Estimation strategy. The paper aims to isolate the effect of perceived changes in housing wealth (*housingwealth*) on individuals' (*i*) life satisfaction (*lifesat*) across time (*t*). To this end, we employ different estimation strategies designed to reduce the risk of omitted variable bias and to better identify the causal effect of perceived changes in housing wealth, albeit at the potential cost of reduced external validity. As a first step, we specify a simple pooled OLS model that estimates the overall relationship between housing wealth and life satisfaction, including all variables from control set A defined above. These results provide important insights into the overall differences in subjective well-being between low- and high-wealth owners in the dataset, which are crucial for assessing the extent of inequality. However, the ability to infer causal effects from this specification is very limited, given the demanding assumption that all potential confounders are controlled for. Therefore, we additionally estimate the following panel regressions with time (γ) and individual (α) fixed effects, which help address potential confounding from unobserved time-invariant characteristics and common time trends in Germany, including overall housing price increases, economic growth, and inflation⁵:

$$lifesat_{i,t} = \beta * housingwealth_{i,t} + \delta X_{i,t} + \alpha_i + \gamma_t + \epsilon_{i,t} \quad (1)$$

This model also includes variables from control set A, represented by vector X , except for the time-invariant variables sex and birth cohort and the linear age effect⁶ because they are absorbed by the inclusion of individual and year fixed effects. This approach provides our main estimate to test the effect of perceived changes in wealth on life satisfaction, as specified in H1.

To isolate the effect of H2 (i.e. the impact of changes in perceived housing wealth on life satisfaction *independent* of changes in the substantive value of the property due to *investments or buying/selling specific properties*) we restrict our models to respondents who did not move during the observation period and include additional time-varying control variables (Z):

$$lifesat_{i,t} = \beta * housingwealth_{i,t} + \delta X_{i,t} + \theta Z_{i,t} + \alpha_i + \gamma_t + \epsilon_{i,t} \quad (2)$$

This set of control variables contains, first, the size of a respondent's housing unit in square meters, which captures wealth effects independent of housing extensions. Second, an indicator

⁵ Models further including county-FE (on Kreiskennziffer-level) to control for time constant differences in local communities yield approximately the same results which is to be expected considering that we include individual FE and focus on a sample that does not move during the observation period (see Appendix table D1).

⁶ The implicit control of a linear age trend also captures the effects of potential confounders that affect life satisfaction via individual's length of residence in our sample using respondents' who did not move during the observation period. In addition, estimates provided in Appendix table E1, models 1 and 2, suggest that even persons who stayed in their homes for over 20 years still show a higher life satisfaction if their perceived housing wealth increases. Assuming social capital gains levels out at some point, this provides additional suggestive evidence that perceived housing wealth provides comfort beyond the fact that people perceive their homes more valuable because they lived at the same place for a long time.

of the subjective evaluation of the unit's overall condition, which accounts for wealth effects independent of renovations or changes in perceived property quality.⁷ Third, we control for the size of the mortgage of the owner-occupied property to ensure that improvements in life satisfaction do not reflect changes in individuals' debt over time but their different estimation of the value of the house net of a potentially existing mortgage. Fourth, additional wealth indicators of households' wealth and debt besides their owner-occupied housing are included to rule out that shifts in a household's overall portfolio drive the observed effects. Since our main independent variable is measured at the household level, all standard errors are clustered at this level.

4 Results

Household wealth and life satisfaction over time

Before turning to the regression results, we first examine the descriptive relationships between our main variables. Panel A of Figure 1 displays the overall difference in life satisfaction between renters and homeowners. The results reveal a substantial disparity: homeowners report, on average, 0.42 scale points higher life satisfaction than tenants across the five-year period, (equivalent to 24% of a standard deviation). While overall life satisfaction increased during the observation period, the ownership gap remained relatively stable over nearly two decades, with the exception of 2017. This finding is particularly noteworthy in the German context, where homeownership rates are comparatively low.⁸

Figure 1 Panel B shows life satisfaction among homeowners and how it relates to the value they assign to their property. As expected, people who perceive their homes as more valuable tend to report higher life satisfaction, though the increase slows at the top of the owner occupied housing wealth distribution. In short, homeowners who consider themselves richer generally report higher life satisfaction. For instance, the top 10% in perceived property value enjoy, on average, life satisfaction scores that are 0.73 points, or about 45% of a standard deviation, higher than those in the bottom half of the distribution.

⁷ Our estimates remain robust when we replace this indicator with a measure of individuals' satisfaction with their dwelling (see Appendix table E1, model 9).

⁸ Our survey-based data show that only 52% of person-years were spent in owner-occupied households. Eurostat reports the same average share for these years suggesting that our sample fits the overall German distribution in this respect (Eurostat, 2025b). Refer to Appendix table A2 for these estimates across survey years.

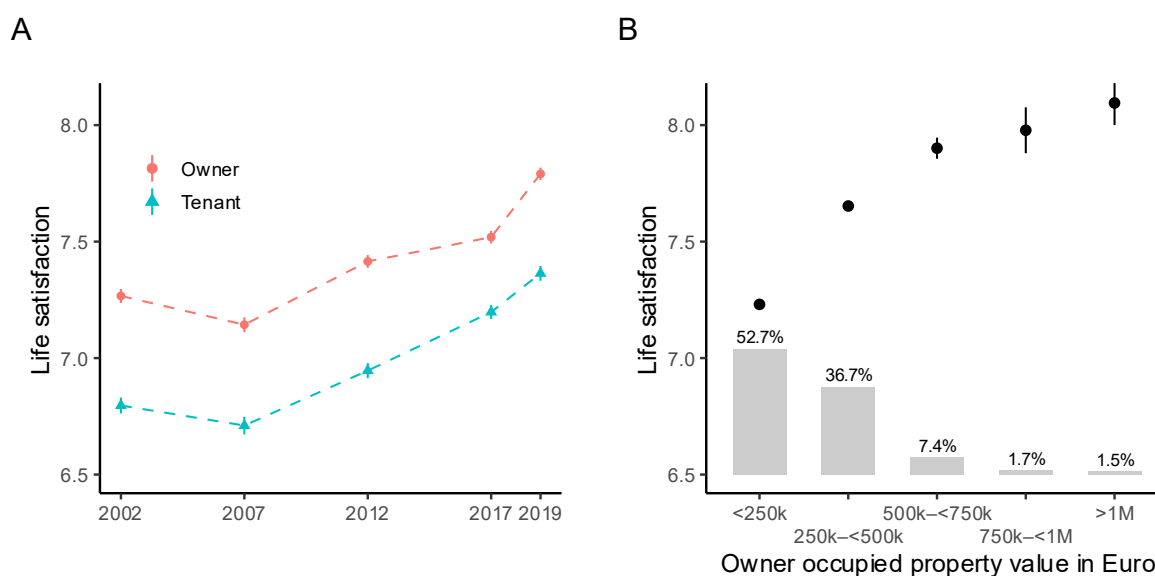


Figure 1. Life satisfaction by housing tenure over time (n= 116,927) (Panel A). Life satisfaction by housing wealth of homeowners (n=50,880) (Panel B). Whiskers indicate 95% confidence intervals. Grey bars in Panel B show the distribution of wealth categories within the sample.

Figure 2 examines average wealth and debt levels across the observation period and estimation strategies. First, looking at the market value of residences and our recalculated variable, we observe that our estimates are slightly upward biased but follow a very similar time trajectory. This suggests that our estimation method successfully replicates within-time changes in housing wealth, closely aligning with the SOEP estimates. Second, a comparison with macro-level data on the German housing price index provided by Eurostat (indicated as grey bars) shows a very similar trajectory to our gross wealth estimates, suggesting that respondents, on average, are able to adjust their assessments of housing wealth despite them likely missing information as individuals rarely have access to up-to-date, transaction-based market values for their properties and must often rely on incomplete, outdated, or indirect cues, such as neighborhood trends or media reports. The figure also shows the substantive importance of including data from 2019, as this allows us to capture a substantial portion of the significant increases in housing prices during the late 2010s and early 2020s. Finally, the figure shows that increases in gross wealth outpaced increases in mortgage sizes, at least until 2017. This led to notable increases in net wealth, suggesting that the existing stock of homeowners benefited substantially, even though newcomers may face higher prices and greater debt burdens. This dynamic contributes to net wealth inequality, as highlighted in previous research (Baldenius, Kohl and Schularick, 2020). Additional statistics in Figure B1 of the Appendix, based on inflation-adjusted wealth estimates, provide similar results.

Overall, the data reveal substantial inequality in life satisfaction, favoring homeowners, particularly those who own high-value properties. Additionally, rising property prices in Germany have increased homeowners' wealth, which is also reflected in higher perceived wealth, suggesting the presence of a macro-micro link between market prices and self-assessed house prices. While these findings are important in their own right—highlighting the increased

vulnerability of tenants and owners of low-value properties—the data do not allow us to draw conclusions about the causal effect of wealth on life satisfaction. To address this, we next turn to the analytical results.

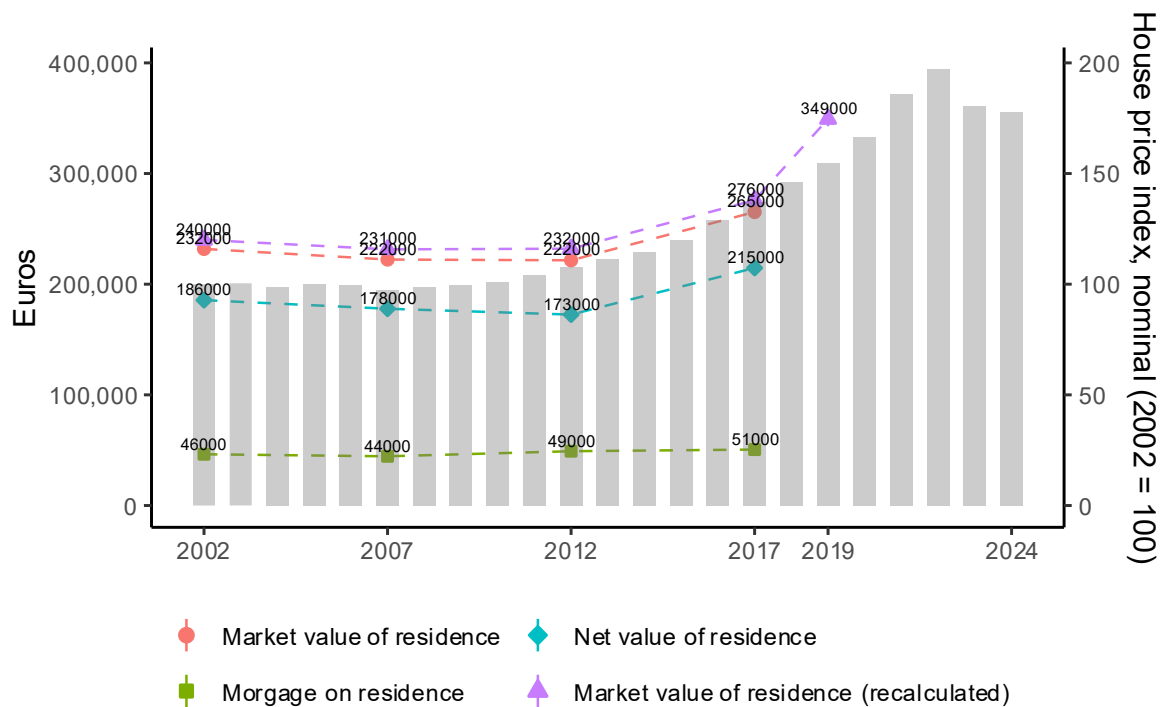


Figure 2. Perceived wealth variables of owner-occupied residence in Euros. House price index is obtained from Eurostat (tipsho20) (Eurostat, 2025). Measures of the market value of the residence, net housing wealth, outstanding mortgage debt, and the recalculated market value of the residence are derived from the SOEP.

The effect of perceived household wealth on life satisfaction

Table 1 presents the results of our main regression models. We begin by examining the sample including movers. Overall, the association between wealth changes and life satisfaction is small but statistically significant: Pooled ordinary least square (POLS) models indicate that a 10% increase in wealth is associated with an approximate 0.016 point increase in life satisfaction, even when controlling for other relevant factors. Focusing on within-individual variation over time, the results of the fixed-effects analysis (Table 1, Model 2) suggest a smaller relationship, with a 10% increase in wealth corresponding to a 0.007 increase in life satisfaction over time. These results suggest that not only income but also perceived wealth in the form of housing is relevant to explaining individuals' subjective well-being.

In alternative models that exclude person-years after respondents' first move during the observation period, thereby reducing the likelihood that property purchases or sales drive our findings, we find that the wealth effect remains largely unchanged (Table 1, model 3). The effect also remains robust when we additionally control for the size of the housing unit and its self-reported condition (note that, because housing condition was not surveyed in 2017, model

4 excludes data from that year) as well as changes in individual's general perception about the development of the German economy. These results partly rule out the possibility that individual investments in the housing unit are responsible for the observed effect of perceived gross housing wealth.

	(1) POLS incl. movers	(2) FE incl. movers	(3) FE excl. movers	(4) FE excl. movers + 2017	(5) FE excl. movers + 2017 & 2019
log(Gross value of primary residence)	0.157*** (0.017)	0.074** (0.025)	0.079** (0.027)	0.084* (0.035)	0.107** (0.040)
log(Household income)	0.551*** (0.024)	0.308*** (0.038)	0.317*** (0.040)	0.347*** (0.051)	0.334*** (0.061)
Size of housing unit (m2)				-0.001 (0.001)	-0.001 (0.001)
Worried about econ. development				-0.062** (0.022)	-0.070** (0.025)
Condition of housing unit (Ref. In good condition)					
Some Renovations				-0.157*** (0.042)	-0.193*** (0.050)
Full Renovations				-0.274+ (0.161)	-0.202 (0.204)
Dilapidated				0.309 (0.766)	-0.019 (2.501)
log(Loan on primary residence)					-0.010* (0.005)
log(Household wealth excl. primary residence)					0.020** (0.007)
log(Household debt excl. primary residence)					-0.004 (0.004)
Num.Obs.	50879	50879	45886	36495	26965
R2	0.096	0.764	0.769	0.811	0.829
R2 Within		0.012	0.012	0.016	0.021
Individual FE		✓	✓	✓	✓
Time FE		✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓

Table 1. Pooled ordinary least square (POLS) and fixed effects (FE) models on individual life satisfaction among homeowners. Additional controls in the POLS model include linear variables for the number of household members, the number of children living in the household, and age (2nd order polynomial), as well as dummies for respondents' sex, birth cohort, marital status, employment status, and region (federal state). FE models also include these controls except sex, cohort, and region. Standard errors are clustered at the household level. Model 5 displays average regression results across wealth imputations and adjusts the variances following Rubin's rules. Stat. significance levels at *5%, **1%, ***.1%. Source: SOEP 2002-2019. Own calculations.

Finally, we turn to Model 5, which adds indicators for the size of the remaining mortgage on the primary residence, household wealth beyond the primary residence, and additional household debt. Because this model relies on estimates provided by the SOEP, it excludes data from 2019. The effect of housing wealth now appears larger, suggesting that the effect of housing wealth net of debt is larger which would be expected as a subjectively increasing house price may make the existing debt burden feel more manageable. A 10% increase in housing wealth is now associated with a 0.011-point increase in life satisfaction. Given a median gross value of EUR 220,000 for a primary residence in 2002, this implies that an increase in perceived housing wealth of EUR 22,000 is associated with a 0.011-point increase in life satisfaction. This effect size is similar to the findings reported by Jantsch, Le Blanc, and Schmidt (2024), who estimate the overall effect of household wealth on life satisfaction to be roughly one third of the effect they report for income. In line with the broader importance of wealth, changes in non-housing wealth are also positively correlated with individuals' life satisfaction, although the coefficient is even smaller. Overall, the results indicate a robust positive effect of self-evaluated housing value on life satisfaction across all specified models. Thus, we find support for both H1 and H2.

5 Discussion

This study asked whether and how subjective changes in perceived housing wealth over time relate to individuals' life satisfaction in Germany. Our findings show, first, that homeowners who report higher perceived housing wealth levels also tend to report higher life satisfaction. Second, changes in perceived housing wealth, even when not accompanied by actual transactions (i.e., among non-moving homeowners who perceive stable housing quality), are associated with changes in life satisfaction. This indicates that temporal perceptions of becoming 'richer' (or 'poorer'), reflected in higher perceived housing wealth, affect subjective well-being. For many homeowners—particularly those without current intentions to sell—the market value of their property is not directly monetizable in the short term. In this context, the observed effect of perceived price changes on life satisfaction is particularly interesting. While these relationships are smaller than most income effects on life satisfaction observed in other studies (Powdthavee, 2010; Lindqvist, Östling and Cesarini, 2020; Smith and Grimes, 2025), the large existing disparities in household wealth suggest that wealth inequality may nevertheless play an important role in explaining differences in life satisfaction.

Research shows that self-reported housing values often deviate from actual transaction-based prices. Such differences in measurement are likely due to factors like owner optimism, limited market knowledge, measurement error and/or psychological biases. However, our findings demonstrate that these subjective evaluations—including their biases—are meaningful to individuals in the sense that they influence their life satisfaction. This highlights the value of survey-based data: While it may not (fully) accurately capture market prices, it provides access to psychological processes and feelings of wealth that remain invisible in transaction records alone. Thus, such survey data are not just a limitation but a vital resource for uncovering how perceived wealth impacts subjective well-being. Feeling richer (poorer), as reflected in higher

perceived housing wealth, can increase (decrease) subjective well-being—independent of income and independent of actual changes in housing circumstances.

Several limitations come with this study. Changes in perceived housing wealth could in part reflect unobserved shifts in local context (e.g., changes in neighbourhood infrastructure, safety, or amenities) that simultaneously improve quality of life and raise perceived property values. Future research should study how perceived and actual changes in house prices relate to each other. Furthermore, our study focuses on wealth differences between households rather than on the intra-household wealth allocation, which has been examined in detail by previous research (Lersch, 2017; Kapelle et al., 2022b; Lersch, Struffolino and Vitali, 2022; Lersch and Schunck, 2023). Future studies may investigate whether the comforting wealth effect we find varies within households depending on the wealth distribution within households. Another open question concerns the direction of causality. Our approach relying on within-individual variation only addresses time-invariant confounding, but reverse causation, that is, more satisfied individuals adopt more positive outlooks on asset values, remains a possibility. While we suggest a theoretical mechanism that links perceived housing wealth to life satisfaction, our empirical investigation does not offer a strict test for that. Experimental or quasi-experimental studies are needed to disentangle the specific mechanisms underlying the relationship between perceived housing wealth and life satisfaction. Finally, it remains an open question whether the observed association reflects concerns about economic security, relative social status, or other psychological channels, and to what extent these mechanisms are context-specific given the geographical focus of our analysis.

Our findings have larger social implications: In periods of rising property values, households who feel left behind may experience lower well-being, while those perceiving gains in housing wealth experience well-being increases, widening differences in life satisfaction. These results indicate that housing wealth may function not only as a financial asset but also as a source of perceived economic security and psychological comfort. Importantly, these findings suggest that perceived gains in housing wealth can affect well-being even without realized capital gains or actual transactions. This finding raises the question whether taxing non-realized capital gains is justified to address wealth inequality, since homeowners derive well-being from perceived, not just realized, wealth (see e.g., Kumar, 2025).

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Appendix for “How much is home worth? Subjective housing wealth and life satisfaction in Germany”

Fabian Kalleitner & Licia Bobzien

A) Sample information

Table A1: Number of individuals and observations across analytical samples

	Full sample	Homeowners*	Analytical sample	Non-movers	Non-movers + controls	Non-movers + controls + add. wealth data
Survey waves	5	5	5	5	4	3
Individuals	59748	31725	26238	24114	22626	17188
Observations	126579	63966	50879	45886	36495	26965

Notes: Number of survey waves, individuals, and person-wave observations by sample definition. Samples differ due to sequential restrictions on homeownership status, residential mobility, availability of control variables, and wealth data. *Individuals living in owner occupied households.

Table A2: Number of observations and share of owners by survey wave (analytical sample)

Survey wave	2002	2007	2012	2017	2019
Share of owners in the SOEP	53.0	53.9	51.2	49.1	52
Share of owners (Eurostat)	53.3 [†]	53.2 [†]	53.3	51.4	51.1
Homeowner - Observations	9580	8928	10550	10710	11111

Notes: Share of owners identifies person-years spent in owner-occupied households. [†] Values for 2002 and 2007 are approximated using the values of 2005 and 2010 respectively. Source: SOEP, own calculations and Eurostat (ilc_lvho02).

Table A3: Descriptive statistics (analytical sample)

	Unique	Missing %	Mean	SD	Min	Median	Max
log(Gross value of primary residence)	743	0	12.3	0.7	0.0	12.3	14.7
log(Loan on primary residence)	787	22	6.0	5.6	0.0	9.5	15.3
log(HH wealth excl. prim. residence)	5800	22	10.4	3.1	0.0	10.9	18.1
log(HH debt excl. prim. residence)	1228	22	3.1	4.8	0.0	0.0	15.9
Life satisfaction	11	0	7.5	1.6	0.0	8.0	10.0
Sex	2	0	1.5	0.5	1.0	2.0	2.0
Age	83	0	51.5	16.1	17.0	51.0	99.0
Number of Persons in HH	13	0	3.0	1.3	1.0	3.0	13.0
Number of Children in HH	9	0	0.7	1.0	0.0	0.0	8.0
log(Household income)	2037	0	8.1	0.5	3.6	8.1	13.8
Size of housing unit (m2)	212	0	132.9	42.7	16.0	126.0	240.0
Worried about econ. development	3	0	1.0	0.6	0.0	1.0	2.0
S. years after moving during obs. period	2	0	0.1	0.3	0.0	0.0	1.0
		N	%				
Marital status	Married	37627	74.0				
	Separated	3282	6.5				
	Single	7456	14.7				
	Widowed	2514	4.9				
Employment status	Full-time empl.	20927	41.1				
	Part-time empl.	10267	20.2				
	Unemployed	1075	2.1				
	In education	2741	5.4				
	Retired	11863	23.3				
	Other non-empl.	4006	7.9				
Condition of housing unit	In good cond.	32022	62.9				
	Some renovat.	7829	15.4				
	Full renovat.	237	0.5				
	Dilapidated	11	0.0				

Notes: Descriptive statistics are based on 50,879 unique person-wave observations of 26,238 individuals across five survey waves.

B) Robustness checks using deflated wealth measures

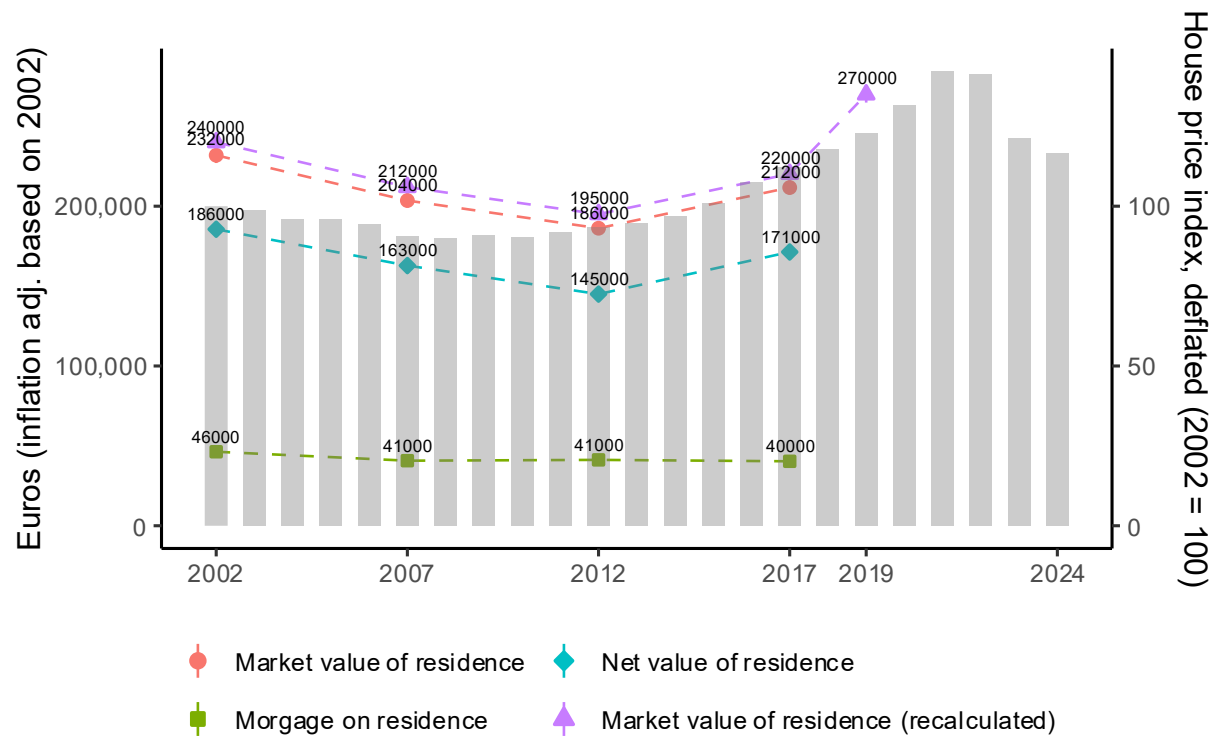


Figure B1. Deflated trends in owner-occupied housing wealth across alternative estimation sources. Perceived wealth variables of owner-occupied residence in Euros.

Notes: The figure displays perceived wealth measures related to owner-occupied housing, expressed in constant euros. Deflated house price index is obtained from Eurostat (tipsho10) (Eurostat, 2025). Measures of the market value of the residence, net housing wealth, outstanding mortgage debt, and the recalculated market value of the residence are derived from the SOEP. Housing values are deflated using the harmonised index of consumer prices (prc_hicp_aind) provided by Eurostat (Eurostat, 2025).

Table B1. Pooled ordinary least square (POLS) and fixed effects (FE) models explaining individual life satisfaction among homeowners using deflated housing wealth indicators.

	(1)	(2)	(3)	(4)	(5)
	POLS	FE	FE	FE	FE
	incl.	incl.	excl.	excl. movers	excl. movers +
	movers	movers	movers	+ 2017	2017 & 2019
log(Real gross value of primary residence)	0.157*** (0.017)	0.075** (0.025)	0.079** (0.027)	0.084* (0.035)	0.107** (0.040)
log(Real household income)	0.552*** (0.024)	0.308*** (0.038)	0.317*** (0.040)	0.347*** (0.051)	0.334*** (0.061)
Size of housing unit (m2)				-0.001 (0.001)	-0.001 (0.001)
Worried about econ. development				-0.062** (0.022)	-0.070** (0.025)
Condition of housing unit (Ref.: In good condition)					
Some renovations				-0.157*** (0.042)	-0.193*** (0.050)
Full renovations				-0.274 (0.161)	-0.203 (0.204)
Dilapidated				0.309 (0.766)	-0.008 (2.510)
log(Real loan on primary residence)					-0.011* (0.005)
log(Real household wealth excl. primary residence)					0.019** (0.007)
log(Real household debt excl. primary residence)					-0.004 (0.004)
Num.Obs.	50879	50879	45886	36495	26965
R2	0.096	0.764	0.769	0.811	0.829
R2 Within		0.012	0.012	0.016	0.021
Indiv. FE		✓	✓	✓	✓
Time FE		✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓

Notes: Additional controls in the POLS model include linear variables for the number of household members and the number of children living in the household and age (2nd order polynomial) as well as dummies for respondents' sex, birth cohort, marital status, employment status, and region (federal state). FE models also include these controls except sex, cohort, and region. Household income and housing values are deflated using the harmonised index of consumer prices. Standard errors are clustered at the household level. Stat. significance levels at *5%, **1%, ***.1%. Source: SOEP 2002-2019. Own calculations.

C) Regressions using SOEP-imputed wealth indicators

Table C1. Pooled ordinary least square (OLS) and fixed effects (FE) models explaining individual life satisfaction among homeowners using SOEP-imputed wealth measures

	(1) FE excl. movers + 2017 & 2019 (analytical sample)	(2) FE excl. movers + 2017 & 2019 (full sample)
log(Gross value of primary residence) †	0.127** (0.046)	0.031** (0.012)
log(Household income)	0.330*** (0.061)	0.262*** (0.055)
Size of housing unit (m2)	-0.001 (0.001)	-0.000 (0.001)
Worried about econ. development	-0.070** (0.025)	-0.081*** (0.023)
Condition of housing unit (Ref.: In good condition)		
Some renovations	-0.191*** (0.050)	-0.177*** (0.045)
Full renovations	-0.201 (0.203)	-0.178 (0.198)
Dilapidated	-0.017 (2.497)	-0.008 (2.580)
log(Loan on primary residence)	-0.011* (0.005)	-0.012** (0.004)
log(Household wealth excl. primary residence)	0.019** (0.007)	0.023*** (0.006)
log(Household debt excl. primary residence)	-0.004 (0.004)	-0.003 (0.004)
Num.Obs.	26965	30874
R2	0.829	0.821
R2 Within	0.021	0.019
Indiv. FE	✓	✓
Time FE	✓	✓
Controls	✓	✓

Notes: † Gross value of primary residence based on SOEP provided values (p010hx). Additional controls include linear variables for the number of household members and the number of children living in the household and age (2nd order polynomial) as well as dummies for marital status and employment status. The estimation sample of model 1 is equal to the one used in Table 1 model 5 in the main text. Model 2 also includes respondent-wave observations with no valid housing value that were imputed by the SOEP using multiple imputation strategies (Grabka and Westermeier, 2015). Standard errors are clustered at the household level. Models display average regression results across wealth imputations and adjust the variances following Rubin's rules. Stat. significance levels at *5%, **1%, ***.1%. Source: SOEP 2002-2019. Own calculations.

Table C2. Linear probability model of item nonresponse for the gross value of the primary residence

	(1)
(Intercept)	1.187*** (0.049)
log(Gross value of primary residence) †	-0.062*** (0.001)
Personal share of Prim. Resid.	-0.049*** (0.006)
Woman (Ref. Men)	0.010** (0.003)
Age	0.000 (0.000)
Marital status (Ref. Married)	
Separated	0.007 (0.010)
Single	0.002 (0.010)
Widowed	0.038** (0.012)
Number of Persons in HH	0.007* (0.003)
log(Household income)	-0.040*** (0.006)
Employment status (Ref. Full-time Employed)	
Part-time employed	-0.008 (0.006)
Unemployed	-0.010 (0.012)
In education	-0.012 (0.011)
Retired	0.003 (0.008)
Other non-employed	0.000 (0.007)
Survey wave (Ref. 2002)	
2007	-0.032*** (0.006)
2012	-0.019** (0.006)
Num.Obs.	30874
R2	0.102

Notes: † Gross value of primary residence based on SOEP provided values (p010hx). Standard errors are clustered at the household level. Models display average regression results across wealth imputations and adjust the variances following Rubin's rules. Stat. significance levels at *5%, **1%, ***.1%. Source: SOEP 2002-2019. Own calculations.

D) Regressions including county fixed effects

Table D1. Pooled ordinary least square (POLS) and fixed effects (FE) models explaining individual life satisfaction among homeowners including county fixed effects.

	(1)	(2)	(3)	(4)	(5)
	POLS	FE	FE	FE	FE
	incl. movers	incl. movers	excl. movers	excl. movers + 2017	excl. movers + 2017 & 2019 SOEP
log(Gross value of primary residence)	0.170*** (0.018)	0.076*** (0.025)	0.087** (0.027)	0.089* (0.035)	0.031* (0.012)
log(Household income)	0.536*** (0.023)	0.304*** (0.039)	0.312*** (0.041)	0.343*** (0.052)	0.260*** (0.056)
Size of housing unit (m2)				-0.001 (0.001)	0.000 (0.001)
Condition of housing unit (Ref.: In good condition)					
Some Renovations				-0.149*** (0.042)	-0.173*** (0.046)
Full Renovations				-0.272 (0.163)	-0.150 (0.199)
Dilapidated				0.324 (0.771)	0.023 (2.602)
Worried about econ. development				-0.060** (0.022)	-0.079*** (0.024)
log(Loan on primary residence)					-0.012** (0.004)
log(Household wealth excl. primary residence)					0.024*** (0.006)
log(Household debt excl. primary residence)					-0.002 (0.004)
N (person-years)	50879	50879	45886	36495	30874
R2	0.130	0.767	0.771	0.813	0.823
R2 Within		0.011	0.012	0.016	0.019
Individual FE		✓	✓	✓	✓
Time FE	✓	✓	✓	✓	✓
County FE (KKZ)	✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓

Notes: Additional controls in the POLS model include linear variables for the number of household members and the number of children living in the household and age (2nd order polynomial) as well as dummies for respondents' sex, birth cohort, marital status, and employment status. FE models also include these controls except sex and cohort. Model 5 uses gross value of primary residence based on SOEP provided values (p010hx). County FE are based on the 400 German district codes (Kreiskennziffern KKZ). Standard errors are clustered at the household level. Stat. significance levels at *5%, **1%, ***.1%. Source: SOEP 2002-2019. Own calculations.

E) Robustness checks with additional sample restrictions and controls

Table E1. Fixed effects (FE) models of life satisfaction among homeowners across subgroups and alternative control specifications

	>=20 years in dwelling		HH without children		Participated in at least 4 survey waves		Owns at least 50% of the primary property		Control for satisfaction with dwelling
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	excl. movers	excl. movers + 2017 & 2019	excl. movers	excl. movers + 2017 & 2019	excl. movers	excl. movers + 2017 & 2019	excl. movers	excl. movers + 2017 & 2019	excl. movers + 2017 & 2019
log(Gross value of primary residence)	0.097* (0.039)	0.091+ (0.054)	0.090** (0.033)	0.111* (0.047)	0.104* (0.046)	0.101 (0.064)	0.088** (0.034)	0.085+ (0.045)	0.067* (0.031)
Num.Obs.	21013	11603	29561	17144	12266	7595	28798	21500	36003
R2	0.786	0.838	0.780	0.829	0.628	0.714	0.787	0.827	0.803
R2 Within	0.016	0.027	0.016	0.024	0.017	0.027	0.015	0.024	0.052
Individual FE	✓	✓	✓	✓	✓	✓	✓	✓	✓
Time FE	✓	✓	✓	✓	✓	✓	✓	✓	✓
Basic controls	✓	✓	✓	✓	✓	✓	✓	✓	✓
Add. controls		✓		✓		✓		✓	✓

Notes: Basic controls include linear variables for logged household income, the number of household members and the number of children living in the household and age (2nd order polynomial) as well as dummies for respondents' marital status, employment status. Additional controls include dummies for respondents' subjective housing condition, housing size in square meters, an indicator of subjective concerns about the state of the economy, and logged values of respondents' loan on primary residence, household wealth excl. those of the primary residence, and household debt excl. those on the primary residence. Model 9 includes a control for respondents' subjective satisfaction with their dwelling measured on a 11-point rating scale from "completely dissatisfied" to "completely satisfied". Standard errors are clustered at the household level. Stat. significance levels at +5%, *5%, **1%, ***.1%. Source: SOEP 2002-2019. Own calculations.