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Wealth transfers and homeownership in Malta

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Wealth transfers and homeownership in Malta¹

Valentina Antonaroli, Warren Deguara and Valerio Sergio Castaldo²

WP/2/2025

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Abstract

In this paper, we study the role of wealth transfers in shaping homeownership in Malta. Leveraging data from four waves of the Maltese Household Finance and Consumption Survey, we perform a logistic regression to investigate how financial inflows in the form of gifts or inheritances, affect (i) the ability of younger households to acquire property, and (ii) afford higher-value homes. Our findings indicate that young households receiving wealth transfers are 15.1% more likely to be homeowners. Larger inheritances exert a stronger influence, with transfers exceeding €94,604 resulting in the highest effect. Households benefitting from gifts or inheritances can afford properties that are on average 31.7% more expensive. Additionally, a 1.0% increase in the transfer size leads to a 1.0% rise in the property value. This result holds for both young households (likely first-time buyers) and older households who can use the transfer to upgrade their dwelling.

JEL Classification: D14, D31, G51, D12

Keywords: Private wealth transfer, homeownership, household

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1 Introduction

Homeownership is a fundamental aspiration for individuals and families, symbolising financial security, social status and personal achievement. In Malta, where limited land availability and rising real estate prices present distinct challenges, the pursuit of homeownership holds particular significance. This paper investigates the influence of wealth transfers on homeownership in Malta, using comprehensive data to examine how financial inflows, such as gifts and inheritances, facilitate property acquisition in a challenging property market.

The Maltese real estate market presents a unique set of challenges. The island's geographical constraints and population growth lead to a high demand for limited land, driving property prices upwards and making homeownership a challenging prospect. Despite this, the cultural preference to owning a home persists, and Malta has one of the highest home-ownership rates in Western Europe. Within this perspective, financial support from family plays a crucial role in enabling prospective homeowners to overcome the barriers posed by high property prices. Wealth transfers from family - often in the form of gifts or inheritances - are a pivotal resource for many aspiring homeowners. This is especially true in the Maltese social context, where family ties are still very strong.

To investigate these dynamics, we draw on data from the Maltese Household Finance and Consumption Survey (HFCS) which provides detailed information on households' real and financial assets, liabilities, net wealth, gross income, consumption and savings.³ It is the only harmonised source of information about household wealth and its distribution in the euro area.

Our research question is twofold. First, we run a logit model to examine whether receiving wealth transfers increases the likelihood of being a homeowner. Secondly, we study whether such wealth transfers correlate positively with ownership of higher-priced properties with a standard ordinary least square (OLS).

Our results suggest that younger households receiving a transfer are on average 15.1% more likely to be homeowners compared to their peers who do not receive such transfers. Larger transfers imply a stronger effect, with transfers exceeding €94,604 being associated with a 20.1% higher probability of homeownership compared to the reference group. Additionally, receiving a transfer is positively correlated with the value of the property. On average, households who received transfers can access properties that are 31.7% more expensive, and a 1.0% increase in the transfer value leads to a 1.0% rise in their property value.

The remainder of this paper is organised as follows. In section 2 we review the existing literature on wealth transfers; in section 3 we provide some descriptive statistics; in section 4 we present the

³ The Household Finance and Consumption Survey is an initiative co-ordinated by the European Central Bank (ECB) and consists of professionals from euro area national central banks (NCBs) and a number of national statistical institutes (NSIs). For more information please refer to the CBM's and ECB' dedicated webpages, respectively: [Household Finance and Consumption Survey - Central Bank of Malta \(centralbankmalta.org\)](https://www.centralbankmalta.org/en/hfcs), [Household Finance and Consumption Survey \(HFCS\) \(europa.eu\)](https://www.eurostat.ec.europa.eu/en/surveys/hfcs).

econometric estimations; in section 5 we perform alternative robustness checks; and section 6 concludes.

2 Literature review

Young households today face significant challenges in achieving homeownership mainly due to rising housing costs which are outpacing income growth. [Vangeel, et al. \(2023\)](#) use EU SILC data to conduct a cross-country analysis of young households and homeownership. They find that the aggregate homeownership rate of young households (with the head of the household aged 0–35 years old) has fallen substantially in Europe between 1998 and 2018. This decline was observed across all income quartiles, with the reduction being more pronounced among lower-income households. Moreover, it was consistent regardless of the entry time into the labour market (serving as a proxy for longer periods of education). [Mundt et al. \(2024\)](#) using Austrian HFCS data, arrive at similar conclusions, indicating that the decline in homeownership among young households in Austria is not due to a shift in preferences but is rather attributed to decreased affordability.

From a theoretical perspective, studies such as [Paz-Pardo \(2023\)](#), indicate that increased earnings inequality and higher earnings volatility could be contributing significantly to lower homeownership rates among younger generations. This is especially the case for lower-income households who struggle with downpayment requirements, and the risk associated with large mortgage commitments.

Indeed, purchasing a home typically involves securing a substantial mortgage and saving enough to cover the down payment. Empirical household finance literature indicates that households employ various strategies to satisfy lenders' requirements. These include foregoing current consumption to boost savings, (e.g., [Engelhardt \(1996\)](#)) and relying on financial transfers and gifts (e.g. [Guiso and Jappelli \(2002\)](#); [Engelhardt and Mayer \(1998\)](#)). In addition, as shown by [Lindner, et al. \(2020\)](#) financially constrained households may contribute their own labour to build or renovate their home, thus reducing the need for external financing.

Moreover, in order to help secure the necessary down payment, prospective homeowners may seek financial support from alternative sources, such as private wealth transfers. The empirical literature on intergenerational transfers shows strong evidence that such transfers help households become homeowners. According to [Spilerman and Wolff \(2012\)](#), parental transfers play a role in raising the down payment for property purchases and enhancing the value of the homes acquired. [Barrett, et al. \(2015\)](#) examine the role of bequests and parental gifts, on the likelihood of attaining homeownership. Using the Household, Income, and Labour Dynamics in Australia (HILDA) dataset they adopt a propensity score matching (PSM) approach, to compare outcomes between individuals who received intergenerational transfers and those who did not. The findings indicate that receiving a bequest increases the probability of homeownership by 4–8 percentage points, while parental transfers, though generally smaller, also show a positive effect on housing outcomes. Additionally, wealth transfers are associated with a higher likelihood of achieving outright ownership. [Blicke and Brown \(2019\)](#) use data

from the 2002-2012 Swiss Household Panel to assess the impact of intra-family wealth transfers on the propensity for renters to transition to homeownership and find that such transfers increase the probability by 6–8 percentage points. [Mathä, et al. \(2023\)](#) use data from the Luxembourg Household Finance and Consumption Survey and find that the probability of homeownership among households is positively related to private wealth transfers and that large transfers (over €100,000) increase the probability of homeownership by more than 10 percentage points.

Our contribution to the literature is twofold. First, we explore whether intergenerational transfers are related positively with homeownership in Malta but with a particular focus on young households. Second, we study whether these transfers correlate with the likelihood of accessing a property of higher value.

3 Descriptive statistics

We use data from the Maltese HFCS, which collects detailed information on households' real and financial assets, their liabilities, income, and consumption for residents in Malta.⁴ We make use of all four available waves, which were conducted in 2010, 2014, 2017 and 2021, resulting in a sample of 3,864 households.⁵ The results presented in this paper were obtained after a minor cleaning process was applied to the raw data to ensure consistency across HFCS waves.⁶

In line with our research question, we are interested in looking at the share of homeownership for households who have either received a transfer or not. In this study, the term transfer is used to describe any type of redistribution of resources, whether real or financial, towards the household.⁷ This definition includes all wealth transfers such as inheritances and gifts, received in any form (money, assets, etc) from the extended family.⁸ This could also include the household main residence (HMR), i.e. the primary dwelling where the household resides.

One third of surveyed households in Malta said to have received at least one transfer once in their life (see Chart 1). Most of these respondents were aged 30 or less at the time they received the transfer. Data also suggests that Maltese households are predominantly homeowners, as shown in Chart 2.⁹

⁴ Foreign nationals living in Malta are included in the sample; however, the results remain robust to their exclusion.

⁵ The sample of the HFCS is made up only of private households. Namely, the population in institutions is excluded from the sample, i.e. persons living in homes for elderly people, military compounds, prisons and boarding schools, amongst others.

⁶ A quick description of the data cleaning process can be found in [Appendix B](#).

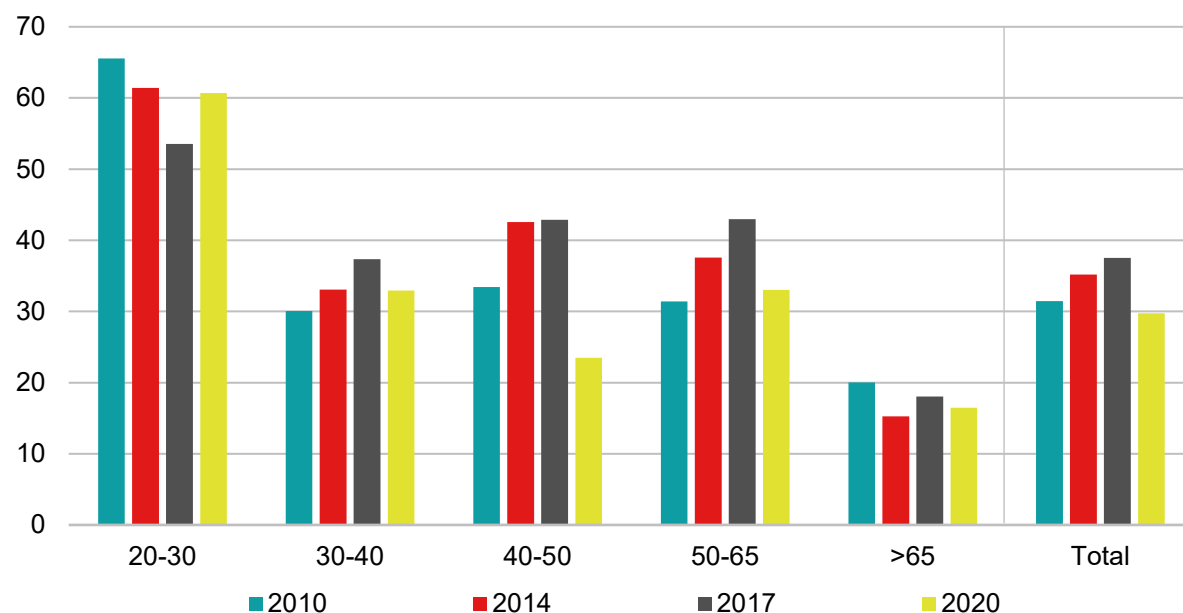
⁷ The exact wording of the underlying question can be found in [Appendix A](#).

⁸ Although the MT-HFCS has a panel component, in this paper we were not able to exploit it. Nonetheless, the cross-sectional nature of the dataset is such that it allows to keep track of the history of the household for certain variables. Specifically, for our study, it provides information on the year in which a transfer was received (which does not necessarily correspond to the survey year).

⁹ In recent waves the home-ownership rate is lowered somewhat due to the large increase in migrant workers, who since they typically have a short length of stay, tend to rent.

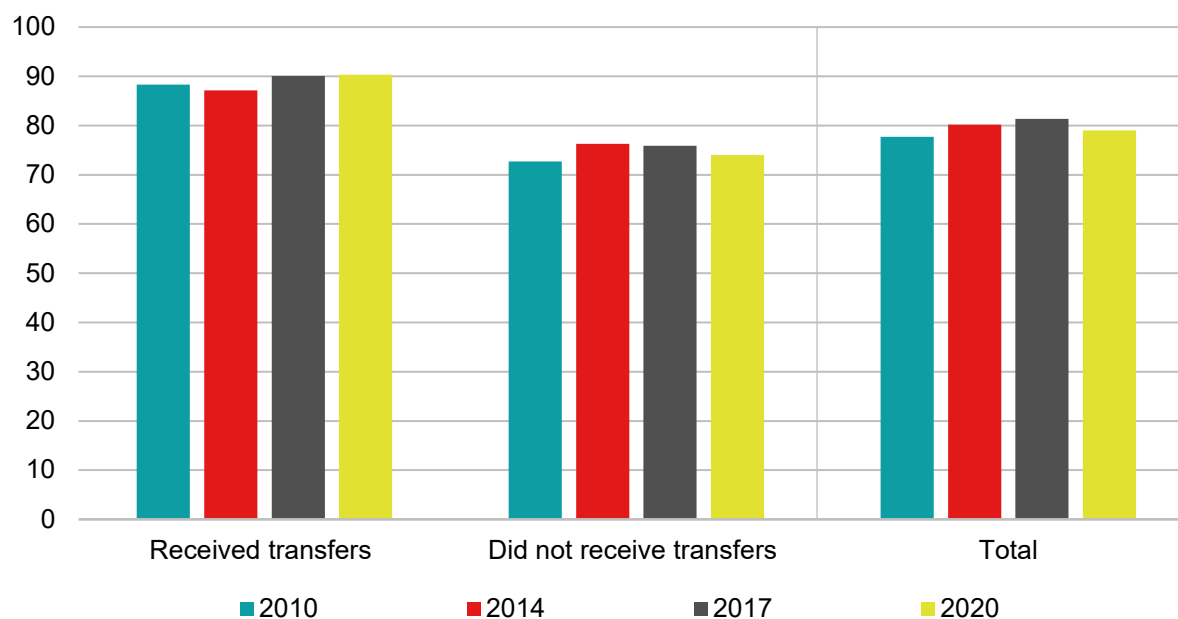
This share is higher when considering households who have received a transfer. All these results are consistent across HFCS waves.

Chart 1
Households receiving transfers by age and survey wave
 (Percentage of households)



Source: Authors' calculations based on 2010, 2014, 2017 and 2021 MT-HFCS data.

Chart 2
Homeownership rates among transfer recipients and non-recipients
 (Percentage of households)



Source: Authors' calculations based on 2010, 2014, 2017 and 2021 MT-HFCS data.

Table 1 shows the distribution of wealth transfers by homeownership status. We find that the percentile thresholds for the value of transfers are always higher for homeowners with respect to renters, along the entire transfer distribution. Furthermore, the gap between transfers received by homeowners and renters increases substantially at the top end of the spectrum.

Table 1
Amount of private wealth transfers
(EUR)

	Renters & other	Homeowners	All households
p10	1,358	3,526	3,152
p25	4,000	11,305	10,293
p50	11,986	36,283	32,291
p75	34,045	103,585	94,604
p90	88,093	210,741	198,508

Notes: Results are weighted to national totals and are reported in 2020 values.

Source: Authors' calculations based on 2010, 2014, 2017 and 2021 MT-HFCS data.

Chart 3 depicts the difference in years between the year in which the transfer was received and the year the HMR was acquired.¹⁰ It shows that although a significant share of transfers was received after the home acquisition, a good portion of households received a transfer around the time they purchased their HMR. The former is likely due to the fact that most transfers are inheritances and thus were received when households grow older and are already in possession of a dwelling. Nonetheless, the latter suggests the presence of a relationship between transfers and home acquisition, indicating that transfers could be used as a source to finance the acquisition.

On average, Maltese households become homeowners at a relatively young age, around 29 years old. We use this fact to replicate Chart 3 but restrict it to only households aged between 20 and 40 at the time of the transfer. Results in Chart 4 show that these transfers are even more important for young homeowners who are more likely (than the average) to have acquired their home around the time they received a transfer. Since younger households have less time to save, this could probably mean that transfers represent a larger share of their down payment (Mathä, et al., 2023).¹¹

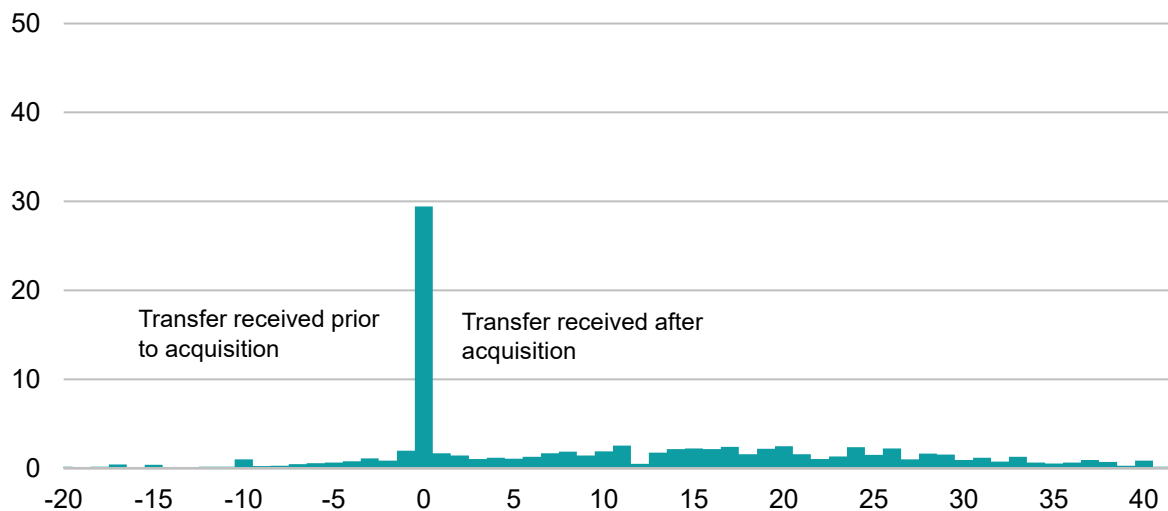
¹⁰ Since the household may have received multiple transfers, we define the main transfer as the one closest to the year of HMR acquisition.

¹¹ This is also in line with previous findings in the literature. See for example: Guiso & Jappelli (2002) and Haurin, et al. (1997).

Chart 3

Difference in years between date of transfer received and of HMR acquisition - all households

(Percentage of households)



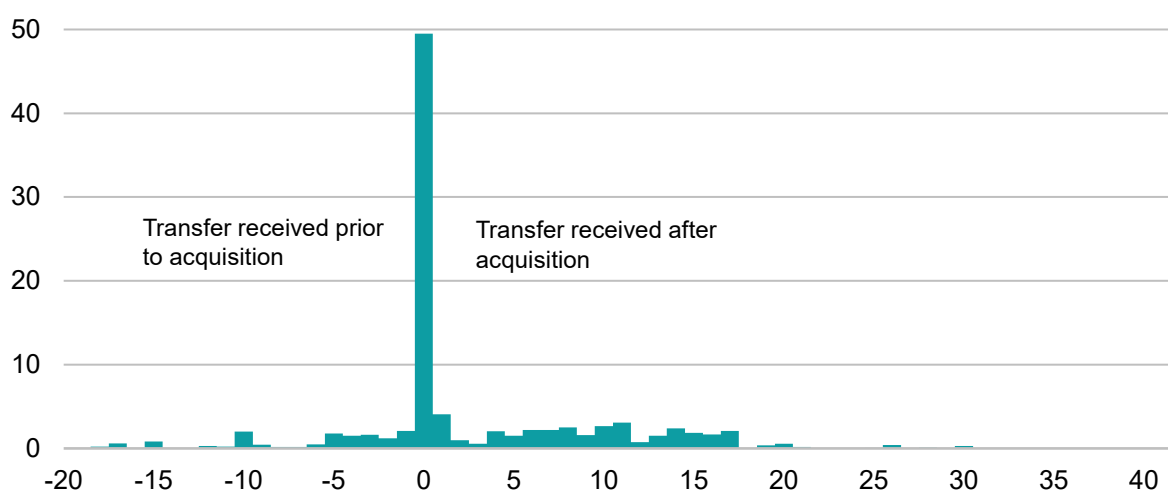
Notes: The chart depicts the difference between the year of the transfers received and the year of home acquisition.

Source: Authors' calculations based on 2010, 2014, 2017 and 2021 MT-HFCS data.

Chart 4

Difference in years between date of transfers received and of HMR acquisition - young households (20-40)

(Percentage of households)



Notes: The chart depicts the difference between the year of the transfers received and the year of home acquisition.

Source: Authors' calculations based on 2010, 2014, 2017 and 2021 MT-HFCS data.

From the previous two charts, we can see that the majority of transfers received is concentrated around the time when the households purchased their first home. Therefore, for the purpose of this study we will consider as transfer of interest for our analysis any transfer which has been received between five years before and three years after the year of the HMR acquisition, that is in the [-5,3] interval. The reason why we consider also transfers received after the time of the HMR acquisition is to include cases where households purchase a unit still under construction and for which the building process takes several months- at times years- to be completed.¹² In such situations, transfers received after the purchase date may still help financing it. Moreover, we only consider as significant the transfers whose value exceeds €10,293, corresponding to the first quartile of the whole distribution of transfers.

Data indicates that among homeowners in Malta, 38.3% reported that they received transfers at some point, but only 11.7% received a transfer of interest, defined as per conditions above.

Out of those homeowners who received a transfer of interest, 18.5% received money while 74.1% received a dwelling.¹³ Around one third of those 74.1% were aged 20-30 when they received the transfer (see Table 3). This proportion is even higher (37.9%) for households in the 30-40 age bracket.

Table 2

Private wealth transfers received, by tenure status and type

(Percentage of households)

	All transfers			Transfers of interest*
	Homeowners	Others	All households	Homeowners
Has received a transfer	38.3	18.4	34.2	11.7
Type of transfer				
Money	41.7	67.7	44.5	18.5
Dwelling	48.7	20.2	45.6	74.1
Others	9.6	12.1	9.9	7.4

Notes: Results are weighted to national totals and are reported in 2020 values.

Source: Authors' calculations based on 2010, 2014, 2017 and 2021 MT-HFCS data.

**We consider transfers received between 5 years before and up to 3 years after HMR acquisition and which exceed €10,293.*

¹² For example, a plot of land or an apartment on plan (i.e. yet to be constructed).

¹³ Unfortunately, the current design of the questionnaire does not explicitly specify if the dwelling received as inheritance/gift is the current main residence of the household or any other dwelling.

Table 3**Private wealth transfers received, homeowners***(Percentage of households)*

	All transfers	Transfers of interest*
Dwelling	48.7	74.1
Age category		
20-30	19.1	30.2
30-40	30.2	37.9
40-50	22.3	13.9
50-65	20.4	13.0
Above 65	8.1	4.9

*Notes: Results are weighted to national totals and are reported in 2020 values.**Source: Authors' calculations based on 2010, 2014, 2017 and 2021 MT-HFCS data.***We consider transfers received between 5 years before and up to 3 years after HMR acquisition and which exceed €10,293.*

4 Econometric analysis

We build two set of models, one for each of our research questions. In Equation (2) we investigate whether households that have received a transfer show an increase in the likelihood of being homeowners. In Equation (3) we study whether transfers correlate positively with the possibility to own a property of higher value.

4.1 First Class of Models

The first class of models (Models 1 and 2) studies the likelihood of being a homeowner as a function of receiving a transfer. We construct the empirical model using a Generalized Linear Model (GLM) framework, which extends linear regression to binary outcomes. Specifically, we employ a logistic regression framework to model binary outcomes based on observed data.

Let $homeownership_{i,t}$ denote the observed housing status of household i at time t of the survey year, where $homeownership_{i,t} = 1$ if the household owns a home and $homeownership_{i,t} = 0$ otherwise. The probability of homeownership is modelled as:

$$Prob[homeownership_{i,t} = 1] = \frac{e^{x_{i,t}\beta}}{1 + e^{x_{i,t}\beta}}, \quad (1)$$

where $x_{i,t}$ is the vector of predictors, and β is the vector of coefficients to be estimated. The logistic regression is estimated as:

$$homeownership_{i,t} = \alpha_{i,t} + \beta * transfer_{i,\tau} + \delta X_{i,t} + \theta_t + \varepsilon_{i,t} . \quad (2)$$

The effect of receiving a transfer on the likelihood of being a homeowner, controlling for other factors, is measured by β , which is our main coefficient of interest. We will consider two specifications of (2). In Model 1, $transfer_{i,\tau}$ is a binary variable indicating whether a member of household i has received a transfer at time τ , whereas in Model 2, $transfer_{i,\tau}$ is further disaggregated into four different indicator variables, representing the thresholds at the quartiles of the transfer distribution.

For our regression we make two restrictions on the transfer. The first one is that we only consider transfers for which τ belongs to the $[-5;3]$ years interval around the year of HMR acquisition.¹⁴ We do not impose any time restriction on renters, and consider all transfers received independently on when the transfer has been received by the household. The second restriction we make is on the size of the transfer by excluding transfers which are below p25 of the transfer distribution, i.e. smaller than €10,293.¹⁵ These two restrictions follow our definition of transfer of interest provided in the descriptive section. Moreover, the specifications for this class of models are estimated exclusively for young households, defined as those whose respondent was under the age of 40 years old at the time when they received the transfer.¹⁶ This age restriction is based on the observation that people in Malta typically (around 75%) become homeowners in their 20s and 30s.¹⁷

Socio-demographics characteristics of the head of the household are captured in $X_{i,t}$, including gender, education level, civil and employment status, household size and their age at the time τ when the transfer was received. We also control for household gross income. Survey year fixed effects θ_t are included to account for systematic differences across survey waves. These effects may reflect time-specific economic conditions, but can also capture differences in survey sampling, methodology, or other unobserved factors unrelated to economic shocks. Lastly, $\alpha_{i,t}$ represents a constant term, and ε_{it} is the independently distributed error term.

The results of the estimation are presented in Table 4. All figures have been adjusted to 2020 values. Model 1 indicates that young individuals receiving a transfer have a 15.1% higher probability of being homeowners compared to those who do not receive any transfer. Model 2 reports an effect of transfers on homeownership which is monotonically increasing with its size, both in terms of statistical significance and coefficient magnitude. The strongest reported impact is the one associated with transfers exceeding €94,604 with an increase in probability of 20.1%. The subsequent lower bracket - households receiving transfers of between €32,291 and €94,604, and between €10,293 and €32,291 have respectively 14.4% and 7.6% higher probability. In contrast, smaller transfers don't exhibit a significant effect, thereby confirming €10,293 as an appropriate threshold for transfers in the context of the homeownership decision.

¹⁴ As a robustness check, we re-estimate the regression with a different time interval in Section 5.1.

¹⁵ As a robustness check, we re-estimate the regression without the age restriction in Section 5.2.

¹⁶ For households that did not receive a transfer, the age is simply the age of the respondent at the time of the survey.

¹⁷ As a robustness check, we re-estimate the regression without the age restriction in Section 5.3.

Table 4
Homeownership regression results

Dependent Variable: Homeownership dummy variable		
	Model 1	Model 2
Past Transfers (dummy)	0.151*** (0.021)	
Small Transfer [<10K]		0.003 (0.033)
Medium Transfer [10K-32K]		0.076*** (0.027)
Large Transfer [32K-94K]		0.144*** (0.048)
Very Large Transfer [>94K]		0.201*** (0.030)
Survey Year FE	Yes	Yes
Characteristics of the reference person	Yes	Yes
Observations	791	791

Notes: The table reports average marginal effects, with standard errors in parentheses. All figures are based on five sets of multiply imputed data and calculated using 1,000 bootstrap replicate weights. Households whose head was older than 40 at the time they received a transfer are excluded from the analysis. For households that did not receive a transfer, the age of the head of the household at the time of the survey is used and the same age restriction is imposed. In addition, only those transfers received within a time frame of 5 years before to 3 years after HMR acquisition are considered as relevant. No restriction is imposed on renters, considering all transfers. In Model 1, transfers below €10,293 are excluded, while Model 2 segments transfers into four categories corresponding to the quartiles of the transfer size distribution. The models also include additional control variables not explicitly reported, such as age categories (20–30, 30–40), gender, education level (primary/no education, secondary, tertiary), civil status (single/never married, married, divorced/widowed), employment status (employed, self-employed, retired, unemployed, or other non-employed), household size, income quintiles, and survey year fixed effects. Results are weighted to national totals and are reported in 2020 values.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Source: Authors' calculations based on 2010, 2014, 2017 and 2021 MT-HFCS data.

4.2 Second Class of Models

The second class of models (Models 3 and 4) addresses the second part of our research question, specifically whether transfers increase the possibility of owning a property of higher value. In this analysis, the dependent variable, $house\ value_{i,\delta}$, is continuous, representing the value of household i 's main residence at time δ of acquisition adjusted to 2020 levels. We adopt the following ordinary least squares (OLS) regression,

$$\log(house\ value_{i,\delta}) = \alpha_{i,t} + \beta * transfer_{i,\tau} + \delta X_{i,t} + \theta_t + \varepsilon_{i,t} \quad (3)$$

In Model 3, $transfer_{i,\tau}$ is a binary indicator signalling whether a transfer was received, consistent with the definition in Model 1. In Model 4, $transfer_{i,\tau}$ is a continuous variable, where the transfer size is

transformed using the inverse hyperbolic sine function.¹⁸ All other variables keep the same meaning as in Equation (2), but in this case we relax the age restriction and include all households aged 20 to 65.

The results of the estimation are shown in Table 5. Model 3 suggests that receiving a transfer is associated with an increase of 31.7% in the value of the HMR, while Model 4 shows that a 1.0% increase in the transfer value corresponds to a 1.0% increase in the value of the HMR. Our findings then seem to confirm our intuition that higher transfers may play an important role in the possibility of purchasing an HMR of higher value.

Table 5
Main residence value regression results

	Dependent Variable: HMR Value (Log)	
	Model 3	Model 4
Past Transfers (dummy)	0.317*** (0.042)	
Transfer Value		0.010*** (0.003)
Survey Year FE	Yes	Yes
Characteristics of the reference person	Yes	Yes
Observations	2,310	2,303

Notes: The table reports OLS coefficients, with standard errors in parentheses. All figures are based on five sets of multiply imputed data and calculated using 1,000 bootstrap replicate weights. Households whose head was older than 65 years old at the time when they received a transfer, are excluded from the analysis. For households that did not receive a transfer, the head's age at the time of the survey is used, and the same age restriction is imposed. In addition, only those transfers received within a time frame of 5 years before to 3 years after HMR acquisition are considered as relevant. No restriction is imposed on renters, considering all transfers. In Model 3, transfers below €10,293 are excluded. In Model 4, all transfers are included regardless of size, after applying an inverse hyperbolic transformation. The models also include additional control variables not explicitly reported, such as age categories (20–30, 30–40), gender, education level (primary/no education, secondary, tertiary), civil status (single/never married, married, divorced/widowed), employment status (employed, self-employed, retired, unemployed, or other non-employed), household size, and survey year fixed effects. Results are weighted to national totals and are reported in 2020 values.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Source: Authors' calculations based on 2010, 2014, 2017 and 2021 MT-HFCS data.

5 Robustness Checks

In this section we challenge the restrictions imposed on the data, namely (i) the time the transfer was received relative to the HMR acquisition; (ii) the size of the transfer; (iii) the age at which the transfer was received; and finally (iv) the type of transfer received.

¹⁸ This transformation allows for variance stabilisation and mitigating the impact of outliers. Additionally, it is also defined for zero-value transfers, which is crucial for including non-inheritors in the analysis. The transformation is given by:

$$\text{asinh}(x) = \ln(x + \sqrt{x^2 + 1}).$$

5.1 Timing of the transfer

In the first robustness test we relax the assumption surrounding the time dimension of gifts, namely that an inheritance is considered of interest if it has been received between 5 years prior and 3 years after the purchase of the main residence. In Tables 12 and 13 we show a re-estimation of our models, restricting this interval to only include transfers received up to three years before home acquisition. In all four cases, we find that the estimated coefficients show minimal change compared to the baseline, suggesting that the stricter time restriction has little impact on the HMR value.

Table 6
Robustness checks: alternative time restriction

Dependent Variable: Homeownership dummy variable		
	Model 1	Model 2
Past Transfers (dummy)	0.123*** (0.021)	
Small Transfer [<10K]		-0.029 (0.034)
Medium Transfer [10K-32K]		0.018 (0.027)
Large Transfer [32K-94K]		0.126*** (0.049)
Very Large Transfer [>94K]		0.169*** (0.030)
Survey Year FE	Yes	Yes
Characteristics of the reference person	Yes	Yes
Observations	791	791

Notes: The table reports average marginal effects, with standard errors in parentheses. All figures are based on five sets of multiply imputed data and calculated using 1,000 bootstrap replicate weights. Households whose head was older than 40 years old at the time when they received a transfer, are excluded from the analysis. For households that did not receive a transfer, the head's age at the time of the survey is used, and the same age restriction is imposed. In addition, only those transfers received within a time frame of 3 years before, up to the year of HMR acquisition are considered as relevant. No restriction is imposed on renters, considering all transfers. In Model 1, transfers below €10,293 are excluded, while Model 2 segments transfers into four categories corresponding to the quartiles of the transfer size distribution. The models also include additional control variables not explicitly reported, such as age categories (20–30, 30–40), gender, education level (primary/no education, secondary, tertiary), civil status (single/never married, married, divorced/widowed), employment status (employed, self-employed, retired, unemployed, or other non-employed), household size, and survey year fixed effects. Results are weighted to national totals and are reported in 2020 values.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Source: Authors' calculations based on 2010, 2014, 2017 and 2021 MT-HFCS data.

Table 7
Robustness checks: alternative time restriction

	Dependent Variable: HMR Value (Log)	
	Model 3	Model 4
Past Transfers (dummy)	0.310*** (0.045)	
Transfer Value		0.015*** (0.004)
Survey Year FE	Yes	Yes
Characteristics of the reference person	Yes	Yes
Observations	2,310	2,310

Notes: The table reports OLS coefficients, with standard errors in parentheses. All figures are based on five sets of multiply imputed data and calculated using 1,000 bootstrap replicate weights. Households whose head was older than 65 years old at the time when they received a transfer, are excluded from the analysis. For households that did not receive a transfer, the head's age at the time of the survey is used, and the same age restriction is imposed. In addition, only those transfers received within a time frame of 3 years before, up to the year of HMR acquisition are considered as relevant. No restriction is imposed on renters, considering all transfers. In Model 3, transfers below €10,293 are excluded. In Model 4, all transfers are included regardless of size, after applying an inverse hyperbolic transformation. The models also include additional control variables not explicitly reported, such as age categories (20–30, 30–40), gender, education level (primary/no education, secondary, tertiary), civil status (single/never married, married, divorced/widowed), employment status (employed, self-employed, retired, unemployed, or other non-employed), household size, and survey year fixed effects. Results are weighted to national totals and are reported in 2020 values.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Source: Authors' calculations based on 2010, 2014, 2017 and 2021 MT-HFCS data.

5.2 Transfer size

Next, we relax the $transfer_{i,t} > €10,293$ restriction and include all transfers received, independently of its value. The results for the first class of models are presented in Table 8. For Model 1, the coefficient decreases slightly compared to the baseline, indicating a 12.5% higher probability of homeownership for households receiving a transfer, compared to 15.1% in the baseline case. Interestingly, Model 3 in Table 9 produces a non-significant estimate. This might suggest that households receiving smaller transfers (now we included transfers of value lower than €10,293 which were excluded in the baseline regression) are more strongly associated with ownership of lower-valued properties, thus negatively affecting the overall significance of the coefficient.

Table 8
Robustness checks: relaxing the size restriction

Dependent Variable: Homeownership dummy variable	
	Model 1
Past Transfers (dummy)	0.125*** (0.018)
Survey Year FE	Yes
Characteristics of the reference person	Yes
Observations	791

Notes: The table reports average marginal effects, with standard errors in parentheses. All figures are based on five sets of multiply imputed data and calculated using 1,000 bootstrap replicate weights. Households whose head was older than 40 years old at the time when they received a transfer, are excluded from the analysis. For households that did not receive a transfer, the head's age at the time of the survey is used, and the same age restriction is imposed. In addition, only those transfers received within a time frame of 5 years before to 3 years after HMR acquisition are considered as relevant. No restriction is imposed on renters, considering all transfers. In this robustness check no restriction is imposed on the transfer size. The models also include additional control variables not explicitly reported, such as age categories (20–30, 30–40), gender, education level (primary/no education, secondary, tertiary), civil status (single/never married, married, divorced/widowed), employment status (employed, self-employed, retired, unemployed, or other non-employed), household size, and survey year fixed effects. Results are weighted to national totals and are reported in 2020 values.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Source: Authors' calculations based on 2010, 2014, 2017 and 2021 MT-HFCS data.

Table 9
Robustness checks: relaxing the size restriction

Dependent Variable: HMR Value (Log)	
	Model 3
Past Transfers (dummy)	0.047 (0.041)
Survey Year FE	Yes
Characteristics of the reference person	Yes
Observations	2,310

Notes: The table reports OLS coefficients, with standard errors in parentheses. All figures are based on five sets of multiply imputed data and calculated using 1,000 bootstrap replicate weights. Households whose head was older than 65 years old at the time when they received a transfer, are excluded from the analysis. For households that did not receive a transfer, the head's age at the time of the survey is used, and the same age restriction is imposed. In addition, only those transfers received within a time frame of 5 years before to 3 years after HMR acquisition are considered as relevant. No restriction is imposed on renters, considering all transfers. In this robustness check no restriction is imposed on the transfer size. The models also include additional control variables not explicitly reported, such as age categories (20–30, 30–40), gender, education level (primary/no education, secondary, tertiary), civil status (single/never married, married, divorced/widowed), employment status (employed, self-employed, retired, unemployed, or other non-employed), household size, and survey year fixed effects. Results are weighted to national totals and are reported in 2020 values.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Source: Authors' calculations based on 2010, 2014, 2017 and 2021 MT-HFCS data.

5.3 Age

Baseline results are estimated exclusively for young households. This implies that all baseline models are estimated for households whose main respondent was under the age of 40 years at the time when the transfer was received. This assumption was justified by the fact that Maltese households tend to become homeowners quite early in their life. Nonetheless to test whether this age restriction is affecting our results, we re-estimate the first class of models for respondents who were between 20 and 65 years old when acquiring their main residence. Table 10 shows a reduced coefficient with respect to the baseline specification, though the effect remains positive and significant. The re-estimation of Model 2 with the extended sample shows a statistically significant reduction in the probability of become homeowners in the case of small and medium-sized transfers. This result aligns with those of [Mathä et al. \(2023\)](#) and might indicate that smaller sized transfers given to younger households might serve as a proxy for intergenerational disadvantage. Moreover, the results confirm our previous intuition that those benefitting the most from transfers, in the context of home acquisition, are younger households.

Table 10
Robustness checks: relaxing the age restriction

	Dependent Variable: Homeownership dummy variable	
	Model 1	Model 2
Past Transfers (dummy)	0.034*** (0.017)	
Small Transfer [<10K]		-0.157*** (0.019)
Medium Transfer [10K-32K]		-0.103*** (0.024)
Large Transfer [32K-94K]		0.027 (0.027)
Very Large Transfer [>94K]		0.144*** (0.027)
Survey Year FE	Yes	Yes
Characteristics of the reference person	Yes	Yes
Observations	2,846	2,846

Notes: The table reports average marginal effects, with standard errors in parentheses. All figures are based on five sets of multiply imputed data and calculated using 1,000 bootstrap replicate weights. Households whose head was older than 65 years old at the time when they received a transfer, are excluded from the analysis. For households that did not receive a transfer, the head's age at the time of the survey is used, and the same age restriction is imposed. In addition, only those transfers received within a time frame of 5 years before to 3 years after HMR acquisition are considered as relevant. No restriction is imposed on renters, considering all transfers. In Model 1, transfers below €10,293 are excluded, while Model 2 segments transfers into four categories corresponding to the quartiles of the transfer size distribution. The models also include additional control variables not explicitly reported, such as age categories (20–30, 30–40), gender, education level (primary/no education, secondary, tertiary), civil status (single/never married, married, divorced/widowed), employment status (employed, self-employed, retired, unemployed, or other non-employed), household size, and survey year fixed effects. Results are weighted to national totals and are reported in 2020 values.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Source: Authors' calculations based on 2010, 2014, 2017 and 2021 MT-HFCS data.

5.4 Transfer type

The final robustness check relaxes the assumptions surrounding the type of transfers included in the estimation. Moreover, it addresses the potential issue of reverse causality in our results. Specifically, if households' intentions to become homeowners are influenced by the knowledge of a possible anticipated transfer rather than the transfer itself driving the decision, our coefficients may be biased due to endogeneity.

To mitigate this, we redefine transfers to include only inheritances and thus excluding voluntary gifts, which are more likely to be planned or expected by the recipient. The results, shown in Tables 11 and 12, present re-estimated coefficients across all models. In Model 1, the coefficient is nearly halved, yet the interpretation remains consistent: households receiving a transfer have a 7.2% higher probability of homeownership compared to their peers. In contrast, the coefficients in Models 3 and 4 remain relatively unchanged, even showing a slight increase in magnitude. Overall, these findings demonstrate that our results don't seem to suffer from endogeneity issues and are robust to different specifications of the model.

Table 11
Robustness checks: excluding voluntary gifts

Dependent Variable: Homeownership dummy variable	
	Model 1
Past Transfers (dummy)	0.072*** (0.021)
Survey Year FE	Yes
Characteristics of the reference person	Yes
Observations	791

Notes: The table reports average marginal effects, with standard errors in parentheses. All figures are based on five sets of multiply imputed data and calculated using 1,000 bootstrap replicate weights. Households whose head was older than 40 years old at the time when they received a transfer, are excluded from the analysis. For households that did not receive a transfer, the head's age at the time of the survey is used, and the same age restriction is imposed. In addition, only those transfers received within a time frame of 5 years before to 3 years after HMR acquisition are considered as relevant. No restriction is imposed on renters, considering all transfers. In Model 1, transfers below €10,293 are excluded, while Model 2 segments transfers into four categories corresponding to the quartiles of the transfer size distribution. The models also include additional control variables not explicitly reported, such as age categories (20–30, 30–40), gender, education level (primary/no education, secondary, tertiary), civil status (single/never married, married, divorced/widowed), employment status (employed, self-employed, retired, unemployed, or other non-employed), household size, and survey year fixed effects. Voluntary gifts are excluded, leaving only inheritances as transfers of interest. Results are weighted to national totals and are reported in 2020 values.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Source: Authors' calculations based on 2010, 2014, 2017 and 2021 MT-HFCS data.

Table 12
Robustness checks: excluding voluntary gifts

	Dependent Variable: HMR Value (Log)	
	Model 3	Model 4
Past Transfers (dummy)	0.365*** (0.047)	
Transfer Value		0.012*** (0.003)
Survey Year FE	Yes	Yes
Characteristics of the reference person	Yes	Yes
Observations	2,310	2,310

Notes: The table reports OLS coefficients, with standard errors in parentheses. All figures are based on five sets of multiply imputed data and calculated using 1,000 bootstrap replicate weights. Households whose head was older than 65 years old at the time when they received a transfer, are excluded from the analysis. For households that did not receive a transfer, the head's age at the time of the survey is used, and the same age restriction is imposed. In addition, only those transfers received within a time frame of 5 years before to 3 years after HMR acquisition are considered as relevant. No restriction is imposed on renters, considering all transfers. In Model 3, transfers below €10,293 are excluded. In Model 4, all transfers are included regardless of size, after applying an inverse hyperbolic transformation. The models also include additional control variables not explicitly reported, such as age categories (20–30, 30–40), gender, education level (primary/no education, secondary, tertiary), civil status (single/never married, married, divorced/widowed), employment status (employed, self-employed, retired, unemployed, or other non-employed), household size, and survey year fixed effects. Voluntary gifts are excluded, leaving only inheritances as transfers of interest. Results are weighted to national totals and are reported in 2020 values.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Source: Authors' calculations based on 2010, 2014, 2017 and 2021 MT-HFCS data.

6 Conclusions

This paper investigates the relationship between wealth transfers and homeownership in Malta. Using household-level microdata from the Maltese HFCS, we find that private wealth transfers, particularly those received near the time of home acquisition, play a significant role in facilitating homeownership.

Our econometric analysis shows that young households aged 20 to 40 who receive wealth transfers have 15.1% higher chances of owning a home, compared to their peers who do not. Larger transfers imply a stronger effect, with the effect increasing to 20.1% for households receiving amounts exceeding €94,604. These findings underline the critical role of family support during a life stage when personal savings are often limited.

Furthermore, wealth transfers also enable access to higher-value properties. On average, home values are 31.7% higher for those who receive a wealth transfer, with a 1.0% increase in transfer size associated with a 1.0% increase in property value at acquisition.

These findings have significant policy implications. Policymakers aiming to enhance homeownership rates should consider measures that recognize and support wealth transfers. Measures such as favourable tax treatments for donations and inheritances, financial education programs, and policies

aimed at reducing transaction costs for property transfers could be particularly beneficial for younger households.

Furthermore, it should be considered that the generations that have been giving transfers to their children typically had the benefit of not being burdened by mortgages to acquire their own residence. This is unlikely to be the case for more recent generations, who therefore could face bigger hurdles to give transfers to their children. In this respect, Government schemes such as the Deposit Guarantee Scheme, which assists people who are eligible for a home loan but do not have the necessary liquidity to pay the downpayment, may become more important in the near future.

The standardised design of the HFCS provides an opportunity to extend this analysis to other European countries, as well as exploiting the panel dimension of the dataset. Future research could explore the transmission channels of this relationship more directly. For instance, the mechanisms behind the mortgage channel should be investigated in detail. Another extension would be to study whether transfers help households becoming homeownership at a younger age.

In conclusion, this study demonstrates that receiving financial support from family strongly correlates with homeownership in Malta. This finding reflects the deep-seated cultural values associated with owning a home in Malta and the pivotal role of familial support in navigating a high-cost real estate market. This dynamic is particularly critical given the context of rising property prices and significant population growth, both of which carry heightened importance in a small country like Malta.

References

- Antonaroli, V., Deguara, W. & Muscat, A., 2023. Household Finance and Consumption Survey in Malta: Results from the Fourth Wave. *Central Bank of Malta*, Issue WP/01/2023.
- Arrigoni, S., Boyd, L. & McIndoe-Calder, T., 2023. The long and the short of it: Inheritance and wealth in Ireland. *Central Bank of Ireland Economic Letter*, 2023(1).
- Barrett, G., Cigdem, M., Whelan, S. & Wood, G., 2015. *The relationship between intergenerational transfers, housing, and economic outcomes*, Melbourne: Australian Housing and Urban Research Institute Limited.
- Blickle, K. & Brown, M., 2019. Borrowing Constraints, Home Ownership and Housing Choice: Evidence from Intra-Family Wealth Transfers. *Journal of Money, Credit and Banking*, Volume 51.
- Duca, J. V. & Rosenthal, S. S., 1994. Borrowing constraints and access to owner-occupied. *Regional Science and Urban Economics*, Volume 24, pp. 301-322.
- Engelhardt, G. V. & Mayer, C. J., 1998. Intergenerational transfers, borrowing constraints, and saving behavior: Evidence from the Housing Market. *Journal of Urban Economics*, Volume 44, pp. 135-157.
- Engelhardt, G. V., 1996. Consumption, down payments, and liquidity constraints. *Journal of Money, Credit and Banking*, 28(2), pp. 255-271.
- Federal Reserve Board, 2016. *Report on the Economic Well-Being of U.S. Households in 2015*, Washington, DC: Board of Governors of the Federal Reserve System.
- Fessler, P., Mooslechner, P. & Schürz, M., 2010. Real Estate Inheritance in Austria. *Monetary Policy and the Economy*, Volume Q2/10, pp. 33-53.
- Guiso, L. & Jappelli, T., 2002. Private transfers, borrowing constraints and the timing of. *Journal of Money, Credit and Banking*, 34(2), pp. 315-339.
- Haurin, D. R., Hendershott, P. & Wachter, S., 1997. Borrowing constraints and the tenure. *Journal of Housing Research*, 8(2), pp. 137-154.
- Lee, H. et al., 2020. The role of parental financial assistance in the transition to homeownership by young adults. *Journal of Housing Economics*, Volume 47, p. 101597.
- Lerman, I. R. & Yitzhaki, S., 1985. Income Inequality Effects by Income Source: A New Approach and Applications to the United States. *The Review of Economics and Statistics*, 67(1), pp. 151-156.
- Lindner, P., Mathä, T. Y., Pulina, G. & Ziegelmeyer, M., 2020. Borrowing constraints, own labour and homeownership: does it pay to paint your walls?. *European Central Bank Working Paper Series*, Volume No 2474.
- Mathä, T., Pulina, G. & Ziegelmeyer, M., 2023. Do Private Wealth Transfers Help With Homeownership? A First Assessment for Luxembourg. *Central Bank of Luxembourg Working Paper*.
- Mundt, A., Wagner, K., Angel, S. & Amann, W., 2024. Homeownership of young adults in Austria from a national and regional perspective since 2010 – a fading dream?. *International Journal of Housing Policy*.
- Nolan, B., Palomino, C. J., Van Kerm, P. & Morelli, S., 2020. The Wealth of Families: The Intergenerational Transmission of Wealth in Britain in Comparative Perspective. *Institute for New Economic Thinking at the Oxford Martin School*.
- Paz-Pardo, G., 2023. Homeownership and Portfolio Choice Over the Generations. *European Central Bank Working Paper Series*, Issue 2522.

Spilerman, S. & Wolff, F.-C., 2012. Parental wealth and resource transfers: How they matter in France for home ownership and living standards. *Social Science Research*, Volume 41, pp. 207-223.

Spiteri, J. & von Brockdorff, P., 2022. Household Wealth and Inheritance Transfers: Evidence from the Euro Area.. *Journal of Family and Economic Issues*, Volume 44, p. 619–633.

Vangeel, W., Defau, L. & De Moor, L., 2023. Young Households' Diminishing Access to Homeownership Attainment in Europe. *Sustainability*, 15(6906).

Appendix A – HFCS Variables

Table A1
HFCS variables used

Variable code	Variable name	Question wording	Categories
HH0100	any substantial gift or inheritance received	(Have you/has any member of the HH) ever received an inheritance or a substantial gift, including money or any other assets (from someone who is not a part of your current household)?	1 - Yes 2 - No
HH0110	No. of gifts/inheritances received	How many?	
HH020\$x	gift/inheritance \$x: year gift/inheritance received	In what year did you/your household receive (it/the most important one for your [household's] current wealth/the next most important one for your [household's] current wealth)?	
HH030\$x	gift/inheritance \$x: what kind of assets received	What kinds of assets were received?	a - Money b - Dwelling c - Use of a dwelling (under reserve or usufruct) d - Land e - Business f - Securities, shares g - Jewellery, furniture, artwork h - Life insurance j - Car / vehicle l - Other assets (specify)
HH040\$x	gift/inheritance \$x: value	At the time (you/your household) received it, how much was it worth?	
HH050\$x	gift/inheritance \$x: type of transfer (gift/inheritance)	Was that a gift or an inheritance?	1 - Gift 2 - Inheritance
HH060\$x	gift/inheritance \$x: from whom received	From whom was it received?	1 - Maternal grandparents 2 - Paternal grandparents 3 - Parents 4 - Children 5 - Other relatives 6 - Other (specify)
HB0500	% of ownership of household main residence	What percentage of the value of the residence	

		belongs to (you/your household)?
HB0600	way of acquiring property	How (did you/your household) acquire the (part of the) residence (you own/your household owns): did you purchase it, did you construct it yourself, did you inherit it or did you receive it as a gift? 1 - Purchased 2 - Own construction 3 - Inherited 4 - Gift 5 - 50% Purchased Or Constructed/50% Inherited Or Received As A Gift [Silent]
HB0700	year of property acquisition	In what year did you (or someone in your current household) acquire the residence or buy the land it is on?
HB0800	property value at the time of its acquisition	How much was the residence <IF HB0600=2 [and/or the associated land]> worth at the time [you/someone in your household] acquired it)? (< If HB0300=2 [only partly owned by the household] > Please consider the price of the entire residence, not just your/your household's share).

Source: MT-HFCS data.

Appendix B – Data cleaning

The first challenge has been to deal with a change in methodology between the earliest vintages of the HFCS (2010, 2014 and 2017) and the 2021 wave. Specifically, up to the 2017 wave respondents were asked whether *in addition* to the HMR, they had received an inheritance or gift, whilst in the 2021 wave the wording of the question ceased to explicitly mention if this was *in addition* or not. This implies that for respondents who said to have inherited (/been gifted) a dwelling, we cannot in the 2020 dataset know if this is the main residence or another property.

In order to solve this discontinuity and homogenise the data across waves, we used another question from the survey as a proxy, namely one asking in which way the main residence was acquired. Table B1 reports the cross-tabulation between these two variables. The inconsistency is represented by the fact that while some households indicated that their HMR had been obtained by means of a gift/inheritance, at the same time they responded that they had not obtained an inheritance/gift in their life. While this makes sense for the first three waves, it does not for the 2021 wave. We thus decided to

correct this inconsistency for all waves, replacing values of the variable HH0100=1 whenever the household had replied to have acquired their HMR by means of a gift, inheritance, or by a combination of inheritance and purchase (respectively when the variable HB0600 is equal to either 3, 4 or 5). The results of these adjustments are shown in Table B2.

Table B1
Cross tabulation - property acquisition and transfer received (original data)
(Percentage)

		HH0100 any substantial gift or inheritance received	
		Yes	No
HB0600 way of acquiring property	Purchased	25.1	74.9
	Own construction	36.6	63.4
	Inherited	47.5	52.5
	Gift	46.9	53.1
	50% inherited, 50% purchased	67.6	32.4
	Total	30.4	69.6

Source: Authors' calculations based on 2010, 2014, 2017 and 2021 MT-HFCS data.

Table B2
Cross tabulation - property acquisition and transfer received (after adjustments)
(Percentage)

		HH0100 any substantial gift or inheritance received	
		Yes	No
HB0600 way of acquiring property	Purchased	25.1	74.9
	Own construction	36.6	63.4
	Inherited	100.0	0.0
	Gift	100.0	0.0
	50% inherited, 50% purchased	100.0	0.0
	Total	36.8	63.2

Source: Authors' calculations based on 2010, 2014, 2017 and 2021 MT-HFCS data.