

Expected wealth transfers and consumption across the wealth distribution in Europe

Miguel Á. Malo^{a,*}, Dario Sciulli^b

^a Department of Economics and Economic History FES Building – Campus ‘Miguel de Unamuno’ Universidad, de Salamanca, 37007, Salamanca, Spain

^b Department of Economics Università di Chieti-Pescara Pindaro St. 42, 65127, Pescara, Italy

ARTICLE INFO

Handling Editor: Sushanta Mallick

JEL Classification:

E21

D31

G51

Keywords:

Inheritances

Gifts

Expectations

Inequality

Liquidity constraints

ABSTRACT

This article presents an empirical analysis of the relationship between expected wealth transfers (inheritances and gifts) and consumption, explicitly considering the distribution of consumption and wealth. While there are many empirical analyses of unexpected wealth transfers, it is unusual to analyze consumption with respect to expected wealth transfers because of the lack of information on expected inheritances or gifts. Using microdata for 17 European countries from the 2014 wave of the Household Finance and Consumption Survey, we find that households expecting a wealth transfer consume as if they were in a higher wealth decile. This increase in consumption differs in size depending on household wealth. We verify that this result is not related to risk preferences or liquidity constraints. These results provide support for consumption smoothing as predicted by the life-cycle model, although the extent of the smoothing depends on the position of the household in the wealth distribution.

1. Introduction

The objective of this research is to analyze the relationship between wealth transfers (inheritances and *inter vivos* transfers) and consumption, taking into account the wealth distribution. One of the most important predictions of the permanent income and life-cycle theories is of consumption smoothing with respect to income variability and wealth shocks, with savings working as a buffer under temporary shocks (Deaton, 1992; Browning and Lusardi, 1996). In turn, a large wealth transfer should result in an increase in savings to finance an increase in consumption along the life cycle (Davies, 2009). For anticipated or expected wealth transfers, households should experience this smoothing effect on consumption before receiving the wealth transfer, and it should not be possible to detect any change just after receipt the (anticipated) wealth transfer. This is the reason why the empirical literature has focused on the effects of unanticipated wealth shocks. In such cases, impacts on savings (creation of a buffer) and on consumption (an increase throughout the life cycle) should be observed after the wealth shock.

Empirical estimations analyzing unexpected wealth transfers show mixed results in terms of the above predictions. In general, receiving an

inheritance slightly increases consumption levels in the long term. At the same time, the buffer function of savings is limited (Joulfaian and Wilhelm, 1994; Brown and Weisbenner, 2004; both for the US). In this vein, Druedahl and Martinello (2022) find a causal impact of inheritance from an unexpected parental death on consumption followed by a return to the old pattern of consumption—only a third of the initial increase in wealth remains nine years after the unexpected parental death. Other authors (such as Márquez et al., 2013) find an asymmetric effect of consumption on unexpected wealth shocks: consumption clearly decreases when there is an unanticipated decrease in wealth, but there is no significant increase in consumption when the household receives an unanticipated positive wealth transfer.

The contribution of our research consists of analyzing wealth transfer expectations—very rarely analyzed before—and changes to households' current consumption patterns in anticipation of these future transfers. In other words, we provide empirical evidence of the smoothing of consumption related to anticipated wealth shocks. To our knowledge, literature examining wealth transfer expectations is scant; only Brown and Weisbenner (2004) provide some descriptive evidence about expectations of substantial wealth transfers for the US case, and Basiglio et al. (2022) analyze the effects of inheritance expectations using

* Corresponding author.

E-mail addresses: malo@usal.es (M.Á. Malo), dario.sciulli@unich.it (D. Sciulli).

longitudinal Dutch data. Neither of these two articles focuses on consumption, as we do in this research.

Part of our contribution also consists of including in our analysis the wealth and household consumption distributions in deciles such that we can consider the potentially different effects of wealth transfers for wealthier households. While the literature on the relationship between wealth shocks and consumption patterns is relatively large (see, for example, [Deaton, 1992](#), for a review), how this relationship changes along the wealth distribution is not well known. Taking into account wealth distribution is potentially interesting because the scarce evidence shows that wealth transfers (increments in wealth because of past transfers) mitigate differences in the wealth distribution and, in fact, transferred wealth represents a larger share of wealth for lower-wealth households ([Brown and Weisbenner, 2004](#)). Some recent contributions show that unexpected inheritances clearly increase consumption in the decade after the windfall ([Druedahl and Martinello, 2022](#); [Nekoei and Seim, 2023](#)); however, this behavior is not constant across the wealth distribution because wealthier heirs rarely use sudden windfalls for consumption. On the other hand, liquidity constraints might limit the consumption response of poorer households, and this is the reason we include this variable in our analysis.

We use data from the Household Finance and Consumption Survey (HFCS), which was launched by the European Central Bank and covers 18 euro-area countries plus Hungary and Poland. We use the 2014 wave of the survey, and we work with the data on households living in the aforementioned countries, excluding Finland and Spain, where the question about wealth transfer expectations was not available in the survey, and the Netherlands because of data irregularity. This is a representative dataset covering many European countries and with homogeneous and comparable information across countries about inheritances, *inter vivos* transfers, consumption and wealth deciles, etc. This dataset also contains variables about sociodemographic and household characteristics, labor market status, etc. Leveraging this information, we estimate different ordinary least squares (OLS) regressions on the log of household consumption. We also empirically explore different additional possibilities, such as the importance of liquidity constraints or risk aversion, providing robustness checks using different subgroups, estimations by country, etc.

2. Literature review

Inherited wealth plays a crucial role in many economic outcomes at both the micro and macro levels. As consumption directly affects welfare, investigating the relationship between wealth transfers and consumption is a key issue for the understanding of the relationship between wealth transfers and welfare. The increasing levels of wealth owned by elderly people and the declining fertility rates that have characterized many economies in recent decades have contributed to increasing wealth transfer flows, with effects on capital accumulation and saving behaviors (e.g., [Kotlikoff and Summers, 1981](#); [Modigliani, 1988](#)). More recently, the increase in the share of inherited wealth that has characterized many Western countries has been interpreted as a factor that may explain the rise of wealth inequalities around the world ([Alvaredo et al., 2017](#)). Receiving an inheritance speeds up household wealth accumulation and exacerbates absolute wealth dispersion because wealthy households are more likely to receive wealth transfers and the amounts that they receive are usually greater than those received by poorer households (e.g., [Elinder et al., 2018](#)). However, at the same time, there is evidence documenting that inheritances and other wealth transfers reduce wealth inequality ([Wolff, 2002](#); [Wolff and Gittleman, 2014](#); [Karagiannaki, 2017](#); [Elinder et al., 2018](#)) because less wealthy heirs receive much larger inheritances than wealthier heirs relative to their preinheritance wealth ([Brown and Weisbenner, 2004](#)).

[Nekoei and Seim \(2023\)](#) provide an answer to this puzzle: inheritances decrease wealth inequality in the short term but increase it in the long term because of the very different depletion rates of heirs depending on their position in the wealth distribution. In other words, behavioral adjustments (i.e., changes in consumption and leisure decisions) dilute the equalizing effects of inheritances because less wealthy heirs tend to spend a larger share of their inherited wealth than wealthier heirs (e.g., [Druedahl and Martinello, 2022](#)). Therefore, analyzing the microeconomic effects of inheritances is important for our understanding of the aggregate evolution of wealth inequality.

At the microeconomic level, much emphasis has been placed on the effects on labor supply, on the one hand, and household consumption, on the other. The well-known *Carnegie conjecture* suggests that large inheritances have a negative impact on the labor supply of heirs ([Holtz-Eakin et al., 1993](#)). The empirical evidence indicates small negative but significant effects of receiving an inheritance, especially along the extensive margins of labor supply ([Holtz-Eakin et al., 1993](#); [Bø et al., 2019](#); [Doorley and Pestel, 2020](#)), and especially for women in estimations disaggregated by gender ([Malo and Sciuilli, 2021](#)). The degree of anticipation of wealth transfers is also an important variable for the size of this effect ([Brown et al., 2010](#)).

Regarding consumption, previous research has also found a positive association between wealth changes and consumption ([Deaton, 1992](#)). Using UK survey data, [Karagiannaki \(2017\)](#) finds that heirs, on average, spend approximately one-third of the amount received. [Druedahl and Martinello \(2022\)](#) analyze the long-run effects of a large financial windfall because of an unexpected parental death on saving behavior. They find that after receiving an inheritance, an individual's wealth converges toward the path it was on prior to the unexpected parental death. In fact, the heirs deplete two-thirds of the initial increase in wealth in the nine years after receiving the sudden windfall. Similar findings are obtained by [Elinder et al. \(2018\)](#), who focus on Swedish administrative data and find that the impact of receiving a wealth transfer on consumption is higher for less wealthy individuals. Additionally, analyzing Swedish administrative data, [Nekoei and Seim \(2023\)](#) find that the average heir depletes her inheritance in ten years but that wealthier heirs leave their wealth increase almost intact. Therefore, not only do inheritances affect aggregate wealth inequality ([Elinder et al., 2018](#)), but these effects differ in terms of the position of the heirs in the wealth distribution ([Druedahl and Martinello, 2022](#); [Nekoei and Seim, 2023](#)). While on average, the increase in consumption tends to occur close to the moment of the unexpected wealth transfer, there are very important differences along the wealth distribution.

Some literature has tried to identify the effects of inheritances using unexpected changes—in particular, [Druedahl and Martinello \(2022\)](#), who use unexpected parental deaths. This strategy assumes that it is not possible to observe the effects of expected inheritances on consumption because the windfall will be anticipated by individuals and consumption will be higher in a period potentially much earlier than when they receive the inheritance or, in general, the wealth transfer. However, if data about expectations of a future inheritance or wealth transfer are available, then those expecting one should have a higher level of consumption, and according to the empirical literature discussed above, this increase in consumption might be different for poor and wealthy heirs. As we will see in the next section, this type of data is available in our dataset, allowing us to perform this empirical analysis, which is complementary to the previous literature analyzing the effects of unexpected wealth transfers.

Previous research on expected wealth transfers is, to our knowledge, limited to [Brown and Weisbenner \(2004\)](#) and [Basiglio et al. \(2022\)](#). Their results are mostly descriptive, especially those obtained by [Brown and Weisbenner \(2004\)](#). [Basiglio et al. \(2022\)](#) explicitly say that all their results are not causal, although the use of a longitudinal database

covering 10 years gives their analysis a wider and deeper scope. Brown and Weisbener (2004) remark that households expecting these transfers on average expect an increase their net worth of just over 50 percent but that the expected future transfer is 4.6 times greater than current household wealth among the least rich households. On the other hand, Basiglio et al. (2022) analyze whether an expected inheritance in the next 10 years is a deterrent to saving, which is confirmed by their empirical analysis. However, an important limitation of their analysis is that they can analyze savings only with a dummy variable. They also find that expecting an inheritance is related to the intentions to bequeath and to intended choices on working after 62 years old. Therefore, analyzing the relationship between wealth transfer expectations and consumption, as we do in this research, is mostly an issue not covered by previous literature.

3. Data

3.1. HFCS database

The analysis is based on data from the Household Finance and Consumption Survey (HFCS), launched by the European Central Bank, the national central banks of the Eurosystem, and a number of national statistical institutes. The HFCS provides information on more than 62,000 households in two different cross-sectional waves (2010 and 2014) across 18 euro area countries plus Hungary and Poland and constitutes a representative micro dataset at the euro area and member state level.

Our study uses data from the 2014 HFCS wave and focuses on households living in the abovementioned countries except for Finland, the Netherlands, and Spain, for which the core variable (i.e., wealth transfer expectations) is not available or the wealth and consumption data appear to be less reliable. This selection leaves us with approximately 61,500 households.

The question of interest asks surveyed households if they expect to receive a substantial gift or inheritance from someone outside of the household (variable HH0700). It relates to the effects of an anticipated wealth transfer on one's current consumption level. The consumption level is defined according to the variable HI0220, which refers to the 'amount spent on consumer goods and services'. Specifically, the question asked of the interviewed households is 'Overall, about how much does your household spend in a typical month on all consumer goods and services? Consider all household expenses, including food, utilities, etc. but excluding consumer durables (e.g. cars, household appliances, etc.), rent, loan repayments, insurance policies, renovation, etc.' Therefore, it measures how much a household spends in a typical month on all consumer goods and services, including food and utilities but excluding consumer durables. The lack of information on consumer durables is a common issue in survey data¹ and may represent a limitation of an analysis such as ours, as a spending increase on consumer durables may be a standard response of consumers to inheritance receipt. The shortcoming, however, may be less relevant in the case of expected wealth transfers, as households should be more prone to increasing consumption of goods requiring small financial outlays, such as food and utilities, rather than consumer durables, which potentially even require indebtedness, considering the time lag between current consumption and the receipt of the expected wealth transfer.

We account in our study for the fact that wealth transfer expectations and current consumption are potentially affected by household wealth. The HFCS dataset provides information on net household wealth excluding public and occupational pensions (variable DN3001). This is obtained by subtracting from total assets (i.e., real plus financial assets,

¹ For example, the US PSID and the European SHARE databases include information only on food consumption (see, e.g., Joulfaian, 2006; Suari-Andreu, 2023).

variable DA3001) the total outstanding balance of a household's liabilities (variable DL1000).² We equalize the data on consumption and wealth by accounting for the number of consumption units in the household according to the modified OECD scale.³ The use of equivalence scales in wealth distribution analysis has been debated in previous literature (OECD, 2013) because wealth may accumulate over a long period and the composition of households may change over time. In addition, sometimes only specific members of the household may have ownership of and access to the inherited wealth. In such cases, it is difficult to justify that equivalence scales are suitable. However, for analyses of the relationship of wealth and inherited wealth with current consumption, the use of equivalence scales is of less concern because economies of scale related to household size and composition are probably important (OECD, 2013; Jäntti et al., 2013; Kuypers and Marx, 2018).⁴ Finally, we stress that the data on equalized consumption and wealth are converted on the basis of purchasing power parity (PPP) to allow consistent comparison across countries.

We control for a variety of potential sources of heterogeneity in the consumption level. We account for age by considering seven dummy variables (16–24, 25–34, 35–44, 45–54, 55–64, 65–74 and 75 or over), and we introduce a dummy variable to account for gender and three dummy variables indicating educational attainment, i.e., low education (primary education and lower secondary), average education (upper secondary) and high education (tertiary education). We also control for marital status, the number of children aged 0–13 years, a dummy variable indicating that the household head is foreign born, and a dummy capturing employment status. For individual-level variables, we attribute to each household the value associated with the household head, considering this an appropriate proxy to describe the household situation. We also include country dummy variables to control for country-specific effects. Finally, thanks to the richness of the information provided by the HFCS, we are able to control for two factors that are usually unobserved in other datasets and that theoretical frameworks predict to significantly affect life-cycle consumption behavior, i.e., the presence of liquidity constraints and risk attitude.

The presence of liquidity constraints may prevent the anticipation effects associated with expected wealth transfers because of the lack of financial resources. If liquidity constraints are completely binding, the consumption effects may take place only when the wealth transfers are effectively received (e.g., Joulfaian, 2006). Regarding risk attitude, it has been stressed that risk-averse individuals might show lower expected utility in the case of uncertain wealth transfer flows (Weil, 1996). We ascribe the presence of liquidity constraints to households to which a lender or creditor has denied credit and to households not applying for credit due to perceived credit constraints.⁵

Our measure of risk attitude is derived from information about

² The variable DA3001 includes real assets (i.e., the value of the household's main property, other real estate property, the household's vehicles and valuables and the value of self-employment business) and financial assets (deposits, mutual funds, bonds, shares, managed accounts, money owed, voluntary pensions and value of non-self-employment private business). The variable DL1000 is the sum of the outstanding balance of mortgage debt and the outstanding balance of other, nonmortgage debt.

³ The modified OECD equivalence scale assigns a value of 1 to the first household member, 0.5 to each additional adult and 0.3 to each child.

⁴ Other authors using the equivalence scale for wealth are, for example, Azpitarte (2011, 2012) and Brandolini et al. (2010).

⁵ We refer to the questions HC1310x and HC1400: 'In the last three years, has any lender or creditor turned down any request you [or someone in your household] made for credit, or not given you as much credit as you applied for?' and 'In the last three years, has any lender or creditor turned down any request you [or someone in your household] made for credit, or not given you as much credit as you applied for?' Households are defined as liquidity constrained if they answered 'Yes, turned down' (versus 'Yes, not given as much credit' or 'No') and 'Yes' (versus 'No'), respectively.

Table 1
Descriptive statistics.

			Expected WT			
	All		Yes		No	
	Mean	Std dev.	Mean	Std dev.	Mean	Std dev.
Equivalent monthly consumption (PPP euros)	688.7	542.7	811.4	585.6	661.9	529.1
Equivalent wealth (PPP euros)	186365.7	1013271.0	226549.6	679826.8	177585.5	1072220.0
Expected wealth transfer	0.179	0.384				
Female	0.446	0.497	0.366	0.482	0.463	0.499
Aged 16–24	0.020	0.140	0.031	0.173	0.018	0.132
Aged 25–34	0.102	0.302	0.160	0.367	0.089	0.285
Aged 35–44	0.169	0.375	0.261	0.439	0.149	0.356
Aged 45–54	0.204	0.403	0.284	0.451	0.186	0.389
Aged 55–64	0.206	0.404	0.188	0.391	0.210	0.407
Aged 65–74	0.167	0.373	0.059	0.236	0.190	0.393
Aged 75 and over	0.133	0.339	0.017	0.129	0.158	0.365
Low education	0.298	0.457	0.200	0.400	0.319	0.466
Medium education	0.411	0.492	0.363	0.481	0.422	0.494
High education	0.291	0.454	0.437	0.496	0.259	0.438
Married	0.583	0.493	0.635	0.482	0.572	0.495
Number of children aged 0–13	0.357	0.753	0.558	0.871	0.312	0.717
Born in a foreign country	0.098	0.297	0.099	0.298	0.098	0.297
Employed	0.574	0.495	0.817	0.387	0.520	0.500
Liquidity constraints	0.065	0.246	0.080	0.271	0.061	0.240
Risk taker	0.051	0.221	0.065	0.246	0.048	0.215
Austria	0.049	0.215	0.026	0.160	0.054	0.225
Belgium	0.036	0.185	0.043	0.203	0.034	0.181
Cyprus	0.021	0.143	0.013	0.112	0.023	0.149
Germany	0.072	0.259	0.048	0.214	0.077	0.267
Estonia	0.036	0.186	0.025	0.155	0.038	0.191
France	0.149	0.356	0.343	0.475	0.107	0.309
Greece	0.049	0.216	0.024	0.152	0.054	0.227
Hungary	0.100	0.299	0.021	0.143	0.117	0.321
Ireland	0.065	0.246	0.062	0.241	0.065	0.247
Italy	0.133	0.339	0.090	0.286	0.142	0.349
Luxembourg	0.026	0.159	0.037	0.188	0.024	0.152
Latvia	0.019	0.138	0.013	0.113	0.021	0.143
Malta	0.016	0.126	0.029	0.169	0.013	0.115
Poland	0.054	0.225	0.014	0.116	0.062	0.242
Portugal	0.100	0.301	0.169	0.375	0.085	0.280
Slovenia	0.042	0.199	0.020	0.139	0.046	0.210
Slovak Republic	0.035	0.183	0.025	0.155	0.037	0.189
Observations	61,483		11,025		50,458	

Source: Our elaboration on the 2014 HFCS data. Note: Personal characteristics (i.e. gender, age, education, etc.) have been attributed according to the characteristics of the head of the household. Equivalent consumption and wealth have been obtained by applying the modified OECD equivalence scale.

investment attitudes; we define a household as risk-taking if the respondent takes substantial or above-average financial risks in the expectation of earning substantial or above-average returns and as risk-averse if the respondent takes average financial risks expecting to earn average returns or is not willing to take any financial risk.⁶

3.2. Descriptive statistics

Sample statistics are presented in Table 1. Column (1) reports the average values of the variables that we use in our analysis (accounting for weights), from which it emerges that households reporting that they expect a wealth transfer in the future (expected recipients, hereinafter) represent 17.9% of the whole sample. Columns (3) and (5) present similar statistics conditional on the household's expecting a wealth transfer or not, respectively.

Looking at the control variables, we do not observe particular gender differences, while the share of people expecting a wealth transfer is

⁶ We refer to question HD 1800, 'Which of the following statements comes closest to describing the amount of financial risk that you (and your husband/wife/partner) are willing to take when you save or make investments?' Households are defined as risk-taking if the respondent answers 'Take substantial financial risks expecting to earn substantial returns' or 'Take above average financial risks expecting to earn above average returns' (versus 'Take average financial risks expecting to earn average returns' and 'Not willing to take any financial risk').

higher for households between ages 35 and 54 and those with medium or high educational attainments. Differences by marital status and country of birth are small, while expected recipients are more likely to be employed and to have more children. Finally, expected recipients are more likely to be liquidity constrained and risk-takers, but only marginally.

On average, the equivalent monthly consumption of expected recipients is higher (811.4 PPP euros) than that of their counterparts (661.9 PPP euros). The equivalent wealth, on average, shows a similar pattern; i.e., it is greater for expected recipients (226,858 PPP euros) than for others (177,564.4 PPP euros).

With respect to the main research question, Fig. 1 confirms the differences in consumption levels conditional on wealth transfer expectations along the wealth distribution. We calculate the average equivalent consumption within 10,000 euro intervals of equivalent wealth for households that expect to receive or not to receive a wealth transfer and represent the related values in a scatterplot. We note that households that expect to receive a wealth transfer consume more than their counterparts in a statistically significant way.

Table 2 reports information about expected wealth transfers, mean equivalent monthly consumption, and equivalent wealth by wealth

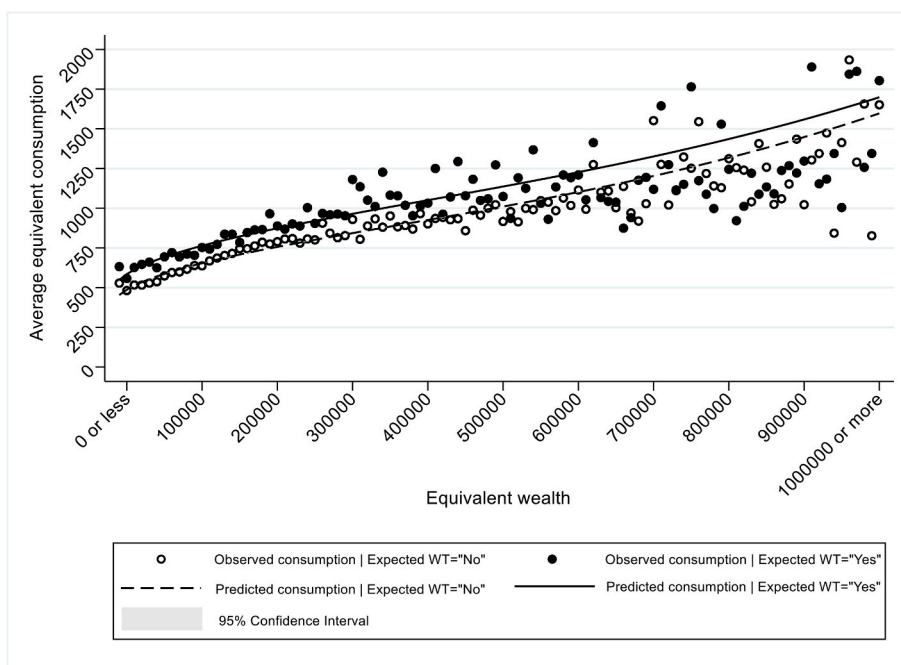


Fig. 1. Average equivalent consumption along the equivalent wealth distribution
 Source: Our elaboration on the 2014 HFCS data. Note: average equivalent consumption refers to the amount consumed in the typical month. Equivalent consumption and equivalent wealth are expressed in PPP euros.

Table 2
 Expected wealth transfers, average equivalent consumption, and average equivalent wealth by wealth decile.

Wealth decile	Expected WT	Equivalent consumption (PPP euros)				Equivalent wealth (PPP euros)			
		Mean		Differences		Mean		Differences	
		Yes	No	P-value	Δ%	Yes	No	P-value	Δ%
1	0.115	555.501	466.988	0.000	18.95%	-11613.4	-6436.7	0.000	80.42%
2	0.164	588.320	515.432	0.000	14.14%	4995.8	4843.5	0.069	3.15%
3	0.157	639.936	517.435	0.000	23.67%	17277.3	17629.2	0.036	-2.00%
4	0.150	645.181	525.638	0.000	22.74%	36194.6	36007.4	0.352	0.52%
5	0.161	686.228	576.681	0.000	19.00%	57627.2	57589.0	0.872	0.07%
6	0.175	704.224	617.450	0.000	14.05%	84841.9	84459.9	0.206	0.45%
7	0.202	773.821	674.675	0.000	14.70%	121359.0	120547.3	0.039	0.67%
8	0.208	865.585	759.029	0.000	14.04%	175163.9	174290.2	0.165	0.50%
9	0.227	994.516	844.985	0.000	17.70%	279958.8	278305.3	0.225	0.59%
10	0.233	1289.701	1198.627	0.001	7.60%	1073519.0	1103586.0	0.743	-2.72%
Total	0.179	811.394	661.836	0.000	22.60%	226858.0	177564.4	0.000	27.76%

Source: Our elaboration on 2014 HFCS data. Note: Average equivalent consumption refers to the amount consumed in a typical month. Equivalent consumption and equivalent wealth are expressed in PPP euros. The null hypothesis is that average equivalent consumption and average equivalent wealth are equal in both subgroups (i.e., Expected WT = ‘Yes’ and Expected WT = ‘No’).

decile.⁷

The frequency of an expected wealth transfer (Column (1)) ranges from 11.5% for households in the first decile of the wealth distribution to 23.3% for those in the tenth decile. This is not surprising, as it is plausible that wealthier households are more likely to expect a wealth transfer because they descend from richer households. Mean consumption also increases along the wealth distribution, confirming that wealthier households consume more. Importantly, expected recipients also consume more (in a statistically significant way) than households that do not expect a wealth transfer. This finding holds along the entire wealth distribution, being true for the poor and for the wealthy. The

average equivalent consumption ranges between €555 and €1290 per month for expected recipients and between €467 and €1198 per month for their counterparts. The relative difference in average consumption varies across wealth deciles, ranging between 7.6% and 23.7%, and tends to be greater at the bottom of the wealth distribution.

We note that the average consumption of households that expect to receive a wealth transfer is comparable to that of households up to three deciles higher in the wealth distribution that do not expect a wealth transfer. In other words, expecting a wealth transfer shifts the consumption distribution to the right with respect to that of households that do not expect a wealth transfer.

To check the robustness of our results, we control for the possibility that within each wealth decile, households expecting to receive a wealth transfer are wealthier than their counterparts. The average wealth levels for each wealth decile and for both groups (Table 2, Columns 7–8) are comparable, however. Even though the differences in wealth levels are occasionally statistically significant, the relative discrepancies are

⁷ Wealth deciles are determined over the pooled wealth distribution (corrected for PPP) of the 17 EU countries analyzed in this study to reflect the shift in the European Union’s character toward that of a social entity (Atkinson, 1998).

contained within 3% (except in the first wealth decile) when we consider cases with higher average equivalent wealth for expected recipients. This suggests that the increase in average consumption is not driven by wealth levels within wealth deciles.⁸ We provide the same statistics calculated at the country level (Table A1). The average equivalent consumption of expected recipients is significantly higher than that measured for households not expecting any wealth transfers. The relative difference for many countries is over 10%. The differences in equivalent wealth between expected recipients or not calculated at the country level are more mixed.

3.3. Econometric specification

We study the impact of expecting a wealth transfer in the future on the current consumption levels of households living in seventeen EU countries. With this aim, we estimate the following regression equation:

$$\begin{aligned} \log consumption_i &= \alpha + X_i\beta + \theta EWT_i + \sum_d \delta_d WD_{di} + \sum_d \gamma_d WD_{di} * EWT_i \\ &+ \pi liquidity_i + \mu risk_i + \varepsilon_i, \text{ with } i \\ &= 1 \dots N, d = 2 \dots 10 \end{aligned} \quad (1)$$

The response variable, equivalent consumption, is expressed in its logarithmic form. On the right-hand side, we include a vector of control variables (X – gender, age, education, marital status, presence of children aged 0–13, foreign-born, employment status, and country dummy variables) and a dummy variable taking a value of one if the household expects to receive a wealth transfer in the future (expected wealth transfer, EWT) and zero otherwise. Because both consumption and wealth transfer expectations evolve along the wealth distribution, we include a set of dummy variables indicating a household's wealth distribution decile (WD). In addition, we explore whether and how the impact of expecting a wealth transfer on consumption varies along the wealth distribution by interacting the variables EWT and WD . $Liquidity$ and $risk$ are dummy variables taking a value of one if the household is liquidity constrained and risk-taking, respectively. ε_i is the error term. α (the intercept) and β are unknown parameters to be estimated. θ is the parameter associated with EWT , δ is a set of parameters associated with the vector WD , and γ is a set of parameters associated with the interacted variables $EWT*WD$. As the first decile of the wealth distribution is the base category, θ expresses the impact on consumption of expecting a wealth transfer for households belonging to the first decile of the wealth distribution. In this respect, the predicted (log) consumption for households that do not expect wealth transfers and belong to the first wealth decile is expressed by the coefficient associated with the constant term. The parameters δ indicate the impact on consumption in the second to the tenth wealth deciles (with respect to the first) for households that do not expect to receive a wealth transfer. $\delta + \gamma$ expresses, instead, the impact on consumption of expecting a wealth transfer for households in the second to the tenth deciles of the wealth distribution. It follows that γ returns a measure of the impact along the wealth distribution of expecting a wealth transfer on consumption with respect to that of households not expecting a wealth transfer. Thus, for $\gamma > 0$, the consumption distribution of expected recipients would be positioned to the right of the consumption distribution of their counterparts for each decile of the wealth distribution. In other words, despite households being in the same wealth decile, in anticipating the future flow of wealth, an expected recipient would increase his or her current

⁸ We repeat this descriptive analysis by considering median consumption and wealth. The results are consistent with those reported in the text. For example, median equivalent consumption is 665 euros for expected recipients and 564 euros for their counterparts. Equivalent wealth within wealth deciles appears to be strictly comparable. The relevant tables are available upon request.

consumption, according to the predictions of the life-cycle model.

With the equation assumed to have a linear functional form, we estimate the parameters of interest using the ordinary least squares (OLS) method. We account for sampling weights corrected for country population weights.

In principle, we cannot rule out that wealth transfer expectations are endogenous in the consumption equation. Unobserved factors may guide both the probability of expecting a wealth transfer and current consumption, resulting in an omitted-variable problem. For example, a risk-taking household is more likely to expect a wealth transfer⁹ and, at the same time, to consume more and *save* less because it is more confident about the future. We try to mitigate possible estimation bias resulting from these circumstances by including a variable controlling for risk attitudes in the empirical specification¹⁰.

4. Results

In this section, we comment on the results of the econometric estimations. First, we focus on our main variable, the expectation of receiving a wealth transfer. Second, we comment on the results related to the control variables. Third, we predict consumption by wealth transfer expectations and wealth decile. Fourth, we perform robustness and propose analyses for different subgroups. Finally, we briefly discuss endogeneity issues, which are also related to the robustness of our results.

4.1. Expected wealth transfers and consumption by wealth decile

The main estimation results are presented in Table 3 (first panel), while the second panel reports coefficients related to the control variables. We provide log point estimates to approximate percentages.

The predicted (log) consumption for the base-category group (i.e., households not expecting a wealth transfer and occupying the first wealth decile) is expressed by the coefficient associated with the constant term (α). The way expected wealth transfers affect consumption is summarized by the parameters θ and γ . In particular, as $\theta = -0.024$, it suggests that expected recipients who belong to the first decile of the wealth distribution consume –2.4% less than their counterparts (i.e., households belonging to the first decile of the wealth distribution and not expecting a wealth transfer, the base category). The estimated coefficient is not statistically significant, however.

Given the base category, the set of parameters δ describes the relationship between consumption and wealth for households that do not expect to receive a wealth transfer. This suggests that consumption

⁹ There is a consensus that risk aversion should decline with wealth (Guiso and Paiella, 2008), which in turn is positively correlated with wealth transfer expectations.

¹⁰ We also try to test for the possibility of cognitive dissonance (Hirschman, 1965). This situation describes individuals who live beyond their means and try to recover consistency between their cognition (e.g. wealth and/or income conditions) and actions (consumption levels) by declaring that they expect to receive a wealth transfer event when this possibility is in fact remote. We test this by estimating a probit model on the probability of reporting the expectation of a wealth transfer conditional on the distance between consumption and wealth deciles to which the individual belongs. The rationale is that for those affected by cognitive dissonance, the greater the (positive) distance, the greater should be the propensity for the individual to report an expectation of a wealth transfer. We find that this association is relatively weak in our data and tends to disappear when the distance reaches its highest value. We interpret these results as not supporting the hypothesis that cognitive dissonance is at work and, therefore, rule it out as a source of endogeneity. However, a proper test of cognitive dissonance would require a richer database including psychological information about individuals and dynamic information showing how preferences are changed by such dissonance. The probit estimations are available upon request.

Table 3
 Estimated impact of an expected wealth transfer and control variables on log equivalent consumption by wealth decile.

	Coefficient	Robust s.e.	
Constant (α)	5.776	0.062	***
Expected WT (θ)	-0.024	0.068	
Wealth decile 2 (δ_2)	0.051	0.033	
Wealth decile 2 x Expected WT (λ_2)	0.088	0.076	
Wealth decile 3 (δ_3)	0.135	0.031	***
Wealth decile 3 x Expected WT (λ_3)	0.167	0.082	**
Wealth decile 4 (δ_4)	0.161	0.033	***
Wealth decile 4 x Expected WT (λ_4)	0.081	0.077	
Wealth decile 5 (δ_5)	0.214	0.031	***
Wealth decile 5 x Expected WT (λ_5)	0.088	0.079	
Wealth decile 6 (δ_6)	0.238	0.035	***
Wealth decile 6 x Expected WT (λ_6)	0.080	0.079	
Wealth decile 7 (δ_7)	0.246	0.033	***
Wealth decile 7 x Expected WT (λ_7)	0.110	0.067	*
Wealth decile 8 (δ_8)	0.299	0.037	***
Wealth decile 8 x Expected WT (λ_8)	0.131	0.075	*
Wealth decile 9 (δ_9)	0.396	0.036	***
Wealth decile 9 x Expected WT (λ_9)	0.085	0.082	
Wealth decile 10 (δ_{10})	0.573	0.035	***
Wealth decile 10 x Expected WT (λ_{10})	0.100	0.061	*
Household head female	-0.061	0.014	***
Household head aged 16–24	base-category		
Household head aged 25–34	0.197	0.067	***
Household head aged 35–44	0.238	0.067	***
Household head aged 45–54	0.240	0.067	***
Household head aged 55–64	0.290	0.065	***
Household head aged 65–74	0.385	0.065	***
Household head aged 75 and over	0.395	0.065	***
Household head low education	base-category		
Household head medium education	0.133	0.018	***
Household head high education	0.306	0.022	***
Household head married	0.007	0.015	
Number of children aged 0–13	-0.060	0.010	***
Household head foreign-born	-0.051	0.024	**
Household head employed	0.044	0.022	**
Household liquidity constrained	-0.018	0.029	
Household prone to risk	0.056	0.030	*
Country dummy variables	Yes		
Observations	61,315		
R-squared	0.273		

Source: Our elaboration on 2014 HFCS data. Note: Predicted log consumption for households in the first wealth decile may be determined by $\alpha + \beta X$ and $\alpha + \theta + \beta X$ for no expected recipients and expected recipients, respectively. For households in the wealth deciles higher than 1, predicted log consumption corresponds to $\alpha + \lambda_d + \beta X$ and $\alpha + \lambda_d + \delta_d + \beta X$ for no expected recipients and expected recipients, respectively. The β vector refers to the parameters associated with the control variables; X includes the average values of related controls.

increases monotonically along the wealth distribution, as expected. The effect ranges from +5.1% to 57.3% for households that belong to the second to the tenth deciles of the wealth distribution.

The sum of parameters δ and γ expresses the consumption–wealth decile relationship for expected recipients; thus, γ captures the net effect of expecting to receive a wealth transfer on consumption with respect to that of the counterparts in the same decile. Our estimates indicate that the effect is positive and statistically significant for some wealth deciles, i.e., the third, seventh, eighth, and tenth ones, thus suggesting that expected recipients consume more than their counterparts in the same wealth decile do. Other coefficients are positive but not statistically significant.¹¹ The positive impact does not increase monotonically, however, being greater in middle-low and high deciles of the wealth distribution and smaller in the central ones. We find the greatest effect

¹¹ We note that clustering standard errors at the country level leads to a decline in standard errors and an increase in the statistical significance of our estimates. The coefficients γ are all statistically significant at 5% and 1% levels, except the one for the second wealth decile. For the sake of brevity, related estimates are available upon request.

on consumption in the third (+16.7%), eighth (+13.1%), and seventh (+11%) deciles of the wealth distribution. The smallest positive impacts (albeit statistically not significant) for expected recipients are equal to 8.1% and 8% and correspond to those occupying the fourth and sixth deciles of the wealth distribution, respectively. These results essentially confirm the evidence emerging from the descriptive analysis. Even after we account for the role of observables, they indicate that households expecting to receive a wealth transfer consume more than their counterparts. Thus, households that anticipate receiving an inheritance/*inter vivos* transfer translate the expected flow of wealth into higher current consumption, in line with the prediction of the life-cycle model.

4.2. Control variables in the benchmark analysis

Table 3 (second panel) illustrates the estimated coefficients related to control variables, which account for observable sources of heterogeneity in consumption levels. We find evidence of gender differences, as consumption levels decrease by approximately 6% in cases with a female household head. Consumption levels monotonically increase with age (up to +39.5% for households with a head aged 65–74 with respect to the base category). Consumption also increases with educational level (households with highly educated heads consume 30.6% more than low-educated households), possibly because of the positive correlation between education and income. Household composition, country of origin, and employment status also explain differences in consumption levels. The presence in the household of children aged 0–13 decreases consumption (–6%); being born in a foreign country decreases one’s consumption level by 5.1%, while being employed increases consumption levels by 4.4%. Being married, instead, does not matter. The liquidity-constraint and risk-taking dummy variables affect the consumption level in the expected directions: experiencing liquidity constraints reduces one’s consumption level by 1.8%, although the estimated coefficient is not statistically significant, while households with an above-average risk propensity consume 5.6% more than their counterparts. Finally, we control for the role of country heterogeneity by including country dummy variables. The related estimates are not shown for the sake of brevity.

4.3. Predicted consumption by wealth transfer expectations and wealth decile

The estimated coefficients reported in Table 3 are used to predict consumption levels conditional on wealth transfer expectations and wealth decile. Table 4 illustrates the predicted values¹² and reports the relative increase in consumption levels associated with an expected wealth transfer. Table 4 is complemented by Fig. 2, where we plot the predicted log consumption values for the same groups of households. We report both point estimates and their related confidence intervals, which allows us to evaluate the significance of the differences in predicted consumption.

The predicted consumption of expected recipients is greater than that of their counterparts, except in the first decile (–9.3 PPP euros). For other deciles, the difference in predicted consumption in favor of expected recipients ranges from 28.3 PPP euros per month to 73.2 PPP euros per month. The results on predicted consumption confirm that expected recipients consume as if they belonged to the decile of the wealth distribution above their own, except in the lowest and highest deciles of the wealth distribution. This suggests that households that expect a wealth transfer actually incorporate this future additional wealth into their endowment and adapt their consumption behavior accordingly.

¹² Predicted consumption is determined as $\widehat{consumption} = \exp(\log consumption)$.

Table 4
Predicted equivalent consumption by wealth transfer expectation and wealth distribution.

Wealth decile	Expected WT		% difference
	Yes	No	
1	406.76	416.51	-2.34%
2	467.12	438.19	6.60%
3	549.67	476.49	15.36%
4	518.22	489.38	5.89%
5	550.17	515.77	6.67%
6	558.89	528.26	5.80%
7	580.51	532.46	9.02%
8	625.70	561.83	11.37%
9	657.64	618.66	6.30%
10	797.26	738.96	7.89%

Source: Our elaboration on the 2014 HFCS data. Note: Predicted equivalent consumption is calculated by taking the exponent of predicted log equivalent consumption displayed in Fig. 2.

Looking at Fig. 2, the consumption level that we observe for expected recipients appears to be significantly greater from a statistical perspective in only a few cases. The different statistical significance that emerges here with respect to the results reported in Table 3 is not surprising, as the related evidence is not strictly comparable. The predicted values reported in Table 4 and Fig. 2, in fact, incorporate the contribution of covariates to current consumption, whereas the estimates reported in Table 3 express the effect of expecting to receive a wealth transfer on current consumption once the role of observables is set aside. In particular, the results that emerge from Fig. 2 possibly indicate that the contribution of other covariates tends to partly offset the effect of wealth transfer expectations on consumption.¹³

4.4. Robustness

We provide alternative approaches to our analysis to test the robustness of the benchmark results reported in Table 3. Related results are presented in the Appendix.

First, we model consumption in terms of absolute rather than relative wealth (Table A2). In this case, we specify equivalent wealth as a polynomial: we consider terms for wealth, wealth squared, and wealth cubed, rather than equivalent wealth deciles. We interact these continuous variables with the dummy variable *EWT* (expected wealth transfer) to uncover how expecting a wealth transfer affects consumption patterns, conditional on wealth. In particular, the coefficients of the interacted variables indicate the additional impact associated with wealth transfer expectation in the wealth–consumption relationship. The related estimation results indicate that those who expect to receive a wealth transfer consume more than their counterparts in a statistically significant way (at the 1% level) for each wealth level. The consumption gap between the two groups tends to increase as wealth increases.

In addition, we run a supplementary analysis where households are assigned to wealth deciles according to the wealth distribution of their respective home countries rather than that of the pooled EU sample (Table A3). Again, the essence of our findings remains substantially unchanged, although we note a more marked effect on consumption for wealthy expected recipients.

4.5. Subgroup analysis

Model (1) above is re-estimated with a focus on specific subgroups, with the aim of testing the robustness of our results. The related estimates are presented in the Appendix. First, we estimate the model on the subsample of liquidity-constrained households (Table A4). We find that

¹³ We note that the 95% confidence intervals overlap in many cases but that this changes considerably when we consider 90% confidence intervals.

expected recipients do not increase their consumption with respect to their counterparts. The only exception is liquidity-constrained households occupying the fifth decile.¹⁴ The small and not statistically significant effect for liquidity-constrained households is consistent with the prediction of the life-cycle model that even when fully anticipated, future wealth transfers do not determine an increase in consumption when households face liquidity constraints (e.g., Joulfaian, 2006).

The second subgroup that we consider is no risk-taker households. The rationale for this exercise is to test whether the responsiveness of the consumption level to an expected wealth transfer is guided by risk appetite. One hypothesis is that optimistic or risk-taking households are more likely both to consume more and to expect a wealth transfer and, therefore, that the positive impact of an expected wealth transfer on consumption that we find could be determined by this underlying link. However, the results reported in Table A5 indicate that the increase in consumption levels in response to an expected wealth transfer holds for no risk-taker households.¹⁵ This is quite reassuring about the validity of the positive association between expected wealth transfers and the increase in consumption levels indicated by our results.

We also investigate the relationship between expected wealth transfers and consumption levels for households with heads of working age (those aged 16–64) and highly educated heads. The results for the former group (Table A6) are quite in line with those obtained for the whole sample, indicating that the relationship between consumption levels and wealth transfer expectations is only slightly guided by the behavior of elderly individuals. When focusing on highly educated households, we find that the impact of expected wealth transfers on consumption levels is greater than what we find for the whole sample (Table A7). The estimates are statistically significant for poorer wealth deciles. Since highly educated households are more likely to have (or have had) better working conditions and prospects, they may represent a group of households less subject to liquidity constraints and/or precautionary saving motives. Under this condition, the positive impact of an expected wealth transfer could be even greater than what we find for the whole sample.

Finally, we run the analysis at the country level to test for consistency with respect to the EU-level results. For the sake of brevity, we do not show the estimated results but summarize the impact of expected wealth transfers on consumption levels by displaying predicted consumption by wealth decile and wealth transfer expectations for each country (Figure A1). Predicted consumption displays a quite regular pattern: consumption substantially increases along the wealth distribution in all analyzed countries, but the gradient is greater in some countries (e.g., France, Italy, and Portugal) and smaller in others (e.g., Austria), suggesting that consumption inequality varies across countries. When focusing on the impact of an expected wealth transfer on consumption, we find that it varies across countries and, according to Figure A1, may present some irregularities, especially in Latvia, Poland, and the Slovak Republic. Relatively few of the estimates are statistically significant, possibly because of the relatively small size of the country-based samples. The vast majority of the analyzed countries display a quite consistent pattern, however, which substantially confirms the findings emerging from the EU-level analysis.

5. Concluding remarks

In this paper, we have shown that anticipating a wealth transfer is related to an increase in current consumption but that the strength of this relationship is not the same across the wealth distribution in

¹⁴ The positive and statistically significant effect disappears when we split the wealth distribution into quintiles, however. The relevant estimates are available upon request.

¹⁵ This result holds when we focus on risk-averse households, i.e., those not willing to take any financial risk.

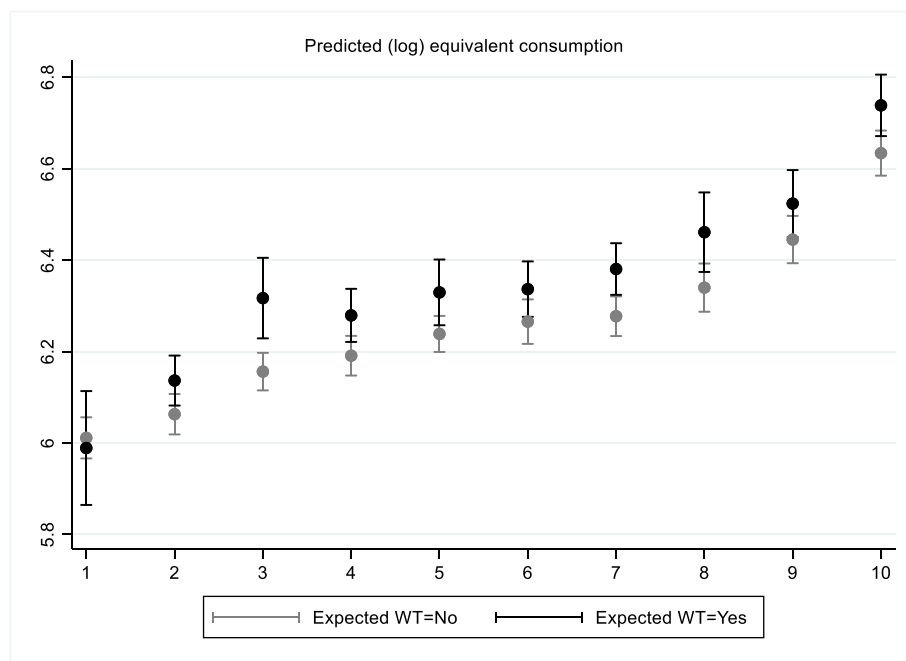


Fig. 2. Predicted log equivalent consumption by wealth transfer expectation and wealth distribution

Source: Our elaboration on the 2014 HFCS data. Predicted values (confidence interval 95%) have been obtained based on the estimation of equation (1), which results have been reported in Table 3.

European countries. Expected recipients consume more than households in the same wealth decile that do not expect a wealth transfer. The average consumption of households that expect to receive a wealth transfer is comparable to that of households up to three deciles higher in the wealth distribution that do not expect a wealth transfer. This is in line with the prediction of the life-cycle model, as those expecting a wealth transfer are thought to anticipate this future increase in wealth and increase their consumption accordingly. However, as shown by econometric estimations, this positive association is not monotonic for those expecting a wealth transfer, being greater in middle-low and high deciles of the wealth distribution and smaller in the central ones. This latter result does not contradict the predictions of the life-cycle model, but this lack of linearity is an important nuance.

Variables related to liquidity constraints and risk appetite affect consumption levels in the expected manner, reducing consumption, although this relationship is statistically significant at conventional levels only for the group with a greater risk appetite, which increases its consumption by 5.6%.

We use econometric expectations to predict consumption and analyze the relative increase in consumption levels due to an expected wealth transfer. These predictions confirm that expected recipients consume as if they belonged to the wealth distribution decile above their own. These findings are strongly confirmed when equivalent wealth is specified in absolute terms as a polynomial (wealth, wealth squared, and wealth cubed).

The subgroup analyses reinforce the general results. The estimations restricted to liquidity-constrained households show that these expected recipients do not increase their consumption, irrespective of their wealth decile, and that no-risk taker households increase their consumption according to the general pattern. Both results are in line with the life-cycle model: those without full access to credit cannot smooth consumption, and risk attitudes do not distort the relationship between expecting a wealth transfer and consumption. Analyses of the wealth and consumption distributions must take into account that expecting future wealth transfers moves households and households toward higher

consumption deciles, in line with the standard life-cycle model rather than with specific preferences regarding risk, i.e., risk-taking vs. risk-averse behavior. When we consider liquidity constraints, the relationship between wealth transfers and consumption smoothing is also coherent with the life-cycle model, as liquidity-constrained households do not increase their consumption.

This new evidence on the effects of expecting a wealth transfer adds to the extensive literature on the effects of receiving unexpected wealth transfers. We consider that our results enrich this literature, providing support for the predictions of the life-cycle model regarding the consumption smoothing effect of expected wealth transfers but with an emphasis on nonlinearities. This research also opens the door to future work identifying causal effects with different empirical strategies based on our descriptive results.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the research reported in this article.

Data availability

Data will be made available on request.

Acknowledgments

We would like to thank the editor and the reviewers for their valuable comments and suggestions, which helped us to improve the quality of the manuscript. Miguel Á. Malo also acknowledges funding from the research project SA049G19 for research groups in the region of Castile and León (Spain). Part of this research was developed while Miguel Á. Malo was at the Università Cattolica del Sacro Cuore (Italy) as visiting professor in November 2021 and November 2022.

Appendix

Table A1

Expected wealth transfer, average equivalent consumption, and average equivalent wealth by country

Country	Expected WT	Equivalent consumption (PPP euros)				Equivalent wealth (PPP euros)			
		Mean		Differences		Mean		Differences	
		Yes	No	P-value	Δ%	Yes	No	P-value	Δ%
Austria	0.10	676.3	636.4	0.013	6.28%	94293.0	148062.0	0.165	-36.32%
Belgium	0.22	816.1	773.2	0.057	5.54%	279158.0	262323.6	0.469	6.42%
Cyprus	0.11	764.2	654.7	0.002	16.72%	207179.6	316198.2	0.063	-34.48%
Germany	0.12	712.4	645.0	0.004	10.45%	282531.9	265497.4	0.654	6.42%
Estonia	0.12	644.2	541.7	0.000	18.91%	72708.7	93017.5	0.252	-21.83%
France	0.41	956.0	918.1	0.074	4.12%	312702.6	424542.0	0.023	-26.34%
Greece	0.09	651.3	550.0	0.000	18.42%	107804.4	67581.9	0.000	59.52%
Hungary	0.04	546.1	463.8	0.000	17.74%	64467.0	56218.6	0.353	14.67%
Ireland	0.17	753.1	656.4	0.000	14.74%	87617.5	121200.9	0.002	-27.71%
Italy	0.12	809.6	750.5	0.000	7.87%	162400.4	150532.7	0.144	7.88%
Luxembourg	0.25	1193.4	1048.2	0.000	13.85%	532472.0	496391.0	0.624	7.27%
Latvia	0.12	586.1	471.4	0.000	24.34%	63612.1	48949.2	0.359	29.96%
Malta	0.32	616.0	597.5	0.359	3.09%	265692.5	216340.7	0.132	22.81%
Poland	0.05	719.7	613.5	0.000	17.30%	89237.0	110237.1	0.215	-19.05%
Portugal	0.30	694.1	653.6	0.000	6.20%	176346.2	158928.3	0.201	10.96%
Slovenia	0.09	655.4	616.4	0.036	6.32%	108112.2	104895.6	0.893	3.07%
Slovak Republic	0.13	595.6	492.8	0.000	20.85%	62945.3	70519.7	0.599	-10.74%

Source: Our elaboration on the 2014 HFCS data. Note: the null hypothesis is that average equivalent consumption and average equivalent wealth are equal in both subgroups (i.e. Expected WT = ‘Yes’ and Expected WT = ‘No’).

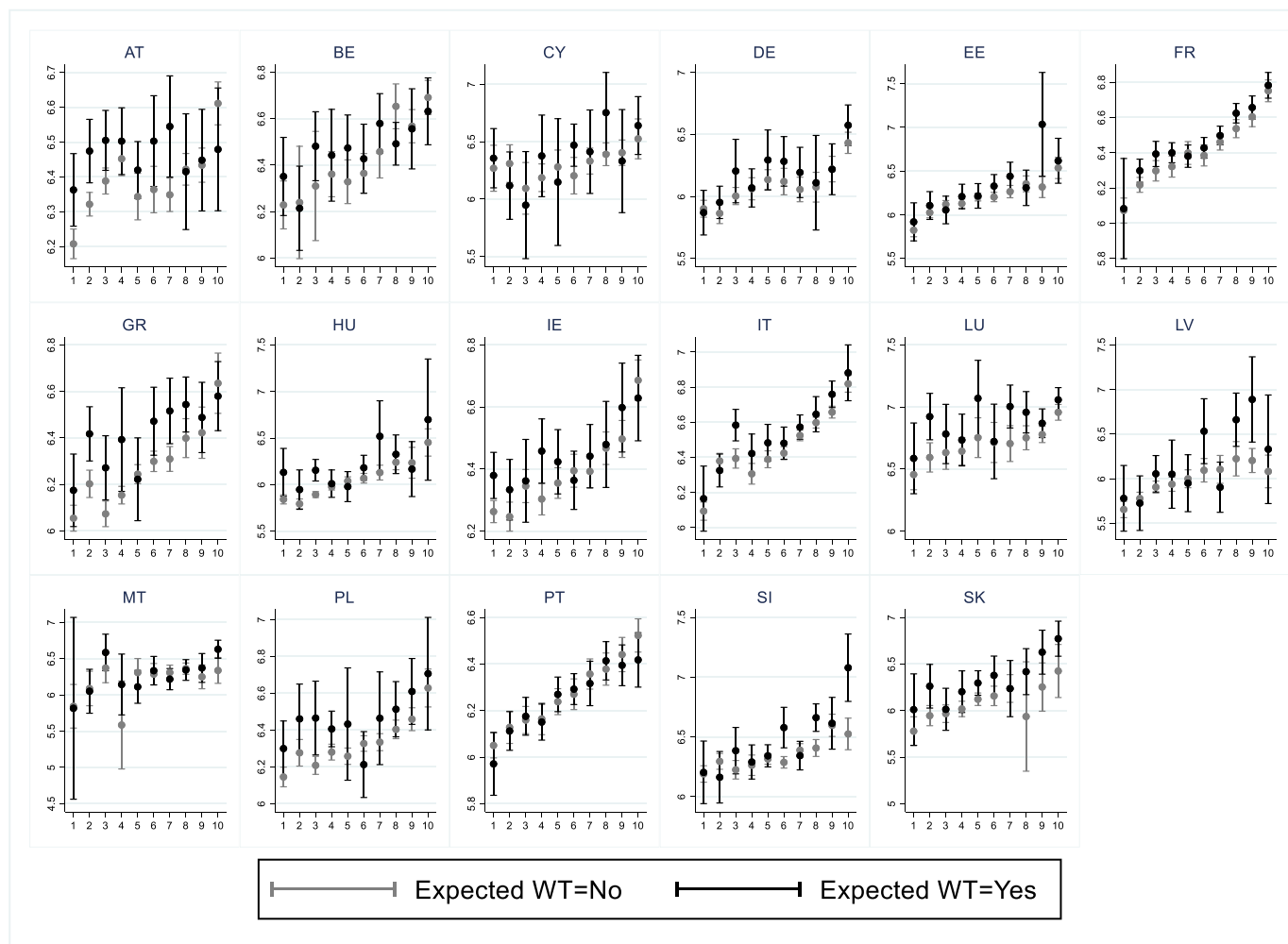


Fig. A1. Predicted log equivalent consumption by wealth transfer expectation and wealth distribution at the country level

Source: Our elaboration on the 2014 HFCS data. Predicted log equivalent consumptions have been obtained by estimating equation (1) at the country level.

Table A2

The estimated impact of an expected wealth transfer on log equivalent consumption by absolute wealth level

Wealth variable	Coeff.	Robust s.e.	
Expected WT	0.046	0.019	**
Equivalent wealth	0.361	0.044	***
Equivalent wealth x Expected WT	0.371	0.077	***
Equivalent wealth squared	-0.016	0.003	***
Equivalent wealth squared x Expected WT	-0.127	0.025	***
Equivalent wealth cubed	0.000	0.000	***
Equivalent wealth cubed x Expected WT	0.006	0.001	***
Control variables		Yes	
Country dummy variables		Yes	
Observations		61,315	
R-squared		0.248	

Source: Our elaboration on the 2014 HFCS data. Note: Coefficients of interaction variables identify the additional effects of expecting a wealth transfer of terms for wealth, wealth squared, and wealth cubed, respectively.

Table A3

The estimated impact of an expected wealth transfer on log equivalent consumption by wealth decile: Wealth distribution defined at the country level

	Coefficient	Robust s.e.	
Constant (α)	5.778	0.062	***
Expected WT (θ)	-0.026	0.067	
Wealth decile 2 (δ_2)	0.052	0.032	
Wealth decile 2 x Expected WT (λ_2)	0.083	0.071	
Wealth decile 3 (δ_3)	0.135	0.031	***
Wealth decile 3 x Expected WT (λ_3)	0.164	0.082	**
Wealth decile 4 (δ_4)	0.160	0.032	***
Wealth decile 4 x Expected WT (λ_4)	0.085	0.076	
Wealth decile 5 (δ_5)	0.218	0.030	***
Wealth decile 5 x Expected WT (λ_5)	0.078	0.079	
Wealth decile 6 (δ_6)	0.231	0.034	***
Wealth decile 6 x Expected WT (λ_6)	0.088	0.078	
Wealth decile 7 (δ_7)	0.244	0.032	***
Wealth decile 7 x Expected WT (λ_7)	0.109	0.066	*
Wealth decile 8 (δ_8)	0.301	0.036	***
Wealth decile 8 x Expected WT (λ_8)	0.132	0.079	*
Wealth decile 9 (δ_9)	0.393	0.036	***
Wealth decile 9 x Expected WT (λ_9)	0.085	0.081	
Wealth decile 10 (δ_{10})	0.570	0.035	***
Wealth decile 10 x Expected WT (λ_{10})	0.106	0.065	*
Observations	61,315		
R-squared	0.273		

Source: Our elaboration on the 2014 HFCS data. Control variables and country dummy variables are accounted for.

Table A4

The estimated impact of an expected wealth transfer on log equivalent consumption by wealth decile: liquidity-constrained individuals

	Coefficient	Robust s.e.	
Constant (α)	6.156	0.213	***
Expected WT (θ)	0.046	0.090	
Wealth decile 2 (δ_2)	0.074	0.090	
Wealth decile 2 x Expected WT (λ_2)	0.029	0.120	
Wealth decile 3 (δ_3)	0.130	0.076	*
Wealth decile 3 x Expected WT (λ_3)	0.012	0.145	
Wealth decile 4 (δ_4)	0.072	0.143	
Wealth decile 4 x Expected WT (λ_4)	-0.090	0.166	
Wealth decile 5 (δ_5)	0.279	0.097	***
Wealth decile 5 x Expected WT (λ_5)	-0.295	0.156	*
Wealth decile 6 (δ_6)	0.253	0.105	**
Wealth decile 6 x Expected WT (λ_6)	-0.069	0.153	
Wealth decile 7 (δ_7)	0.144	0.103	
Wealth decile 7 x Expected WT (λ_7)	-0.035	0.157	
Wealth decile 8 (δ_8)	0.077	0.177	
Wealth decile 8 x Expected WT (λ_8)	0.362	0.227	
Wealth decile 9 (δ_9)	0.371	0.132	***
Wealth decile 9 x Expected WT (λ_9)	0.092	0.181	
Wealth decile 10 (δ_{10})	0.205	0.273	
Wealth decile 10 x Expected WT (λ_{10})	0.150	0.314	
Observations	3960		
R-squared	0.188		

Source: Our elaboration on the 2014 HFCS data. Control variables and country dummy variables are accounted for.

Table A5

The estimated impact of an expected wealth transfer on log equivalent consumption by wealth decile: No risk-taker individuals

	Coefficient	Robust s.e.	
Constant (α)	5.905	0.064	***
Expected WT (θ)	-0.031	0.073	
Wealth decile 2 (δ_2)	0.044	0.033	
Wealth decile 2 x Expected WT (λ_2)	0.092	0.081	
Wealth decile 3 (δ_3)	0.128	0.031	***
Wealth decile 3 x Expected WT (λ_3)	0.165	0.085	*
Wealth decile 4 (δ_4)	0.150	0.033	***
Wealth decile 4 x Expected WT (λ_4)	0.089	0.082	
Wealth decile 5 (δ_5)	0.212	0.031	***
Wealth decile 5 x Expected WT (λ_5)	0.087	0.084	
Wealth decile 6 (δ_6)	0.214	0.034	***
Wealth decile 6 x Expected WT (λ_6)	0.105	0.083	
Wealth decile 7 (δ_7)	0.240	0.034	***
Wealth decile 7 x Expected WT (λ_7)	0.115	0.082	
Wealth decile 8 (δ_8)	0.299	0.037	***
Wealth decile 8 x Expected WT (λ_8)	0.127	0.090	
Wealth decile 9 (δ_9)	0.389	0.037	***
Wealth decile 9 x Expected WT (λ_9)	0.094	0.088	
Wealth decile 10 (δ_{10})	0.562	0.036	***
Wealth decile 10 x Expected WT (λ_{10})	0.134	0.084	
Observations	58,163		
R-squared	0.257		

Source: Our elaboration on the 2014 HFCS data. Control variables and country dummy variables are accounted for.

Table A6

The estimated impact of an expected wealth transfer on log equivalent consumption by wealth decile: working-age individuals

	Coefficient	Robust s.e.	
Constant (α)	6.077	0.053	***
Expected WT (θ)	-0.045	0.087	
Wealth decile 2 (δ_2)	0.049	0.041	
Wealth decile 2 x Expected WT (λ_2)	0.115	0.095	
Wealth decile 3 (δ_3)	0.096	0.041	**
Wealth decile 3 x Expected WT (λ_3)	0.205	0.102	**
Wealth decile 4 (δ_4)	0.122	0.046	*
Wealth decile 4 x Expected WT (λ_4)	0.103	0.098	
Wealth decile 5 (δ_5)	0.203	0.044	***
Wealth decile 5 x Expected WT (λ_5)	0.100	0.101	
Wealth decile 6 (δ_6)	0.189	0.053	***
Wealth decile 6 x Expected WT (λ_6)	0.107	0.104	
Wealth decile 7 (δ_7)	0.186	0.051	***
Wealth decile 7 x Expected WT (λ_7)	0.178	0.101	*
Wealth decile 8 (δ_8)	0.216	0.066	***
Wealth decile 8 x Expected WT (λ_8)	0.174	0.106	*
Wealth decile 9 (δ_9)	0.349	0.054	***
Wealth decile 9 x Expected WT (λ_9)	0.155	0.095	*
Wealth decile 10 (δ_{10})	0.498	0.064	***
Wealth decile 10 x Expected WT (λ_{10})	0.104	0.113	
Observations	51,966		
R-squared	0.245		

Source: Our elaboration on the 2014 HFCS data. Control variables and country dummy variables are accounted for.

Table A7

The estimated impact of an expected wealth transfer on log equivalent consumption by wealth decile: highly educated individuals

	Coefficient	Robust s.e.	
Constant (α)	5.902	0.123	***
Expected WT (θ)	-0.271	0.249	
Wealth decile 2 (δ_2)	-0.059	0.082	
Wealth decile 2 x Expected WT (λ_2)	0.415	0.251	*
Wealth decile 3 (δ_3)	0.039	0.075	
Wealth decile 3 x Expected WT (λ_3)	0.474	0.260	*
Wealth decile 4 (δ_4)	0.005	0.075	
Wealth decile 4 x Expected WT (λ_4)	0.370	0.228	*
Wealth decile 5 (δ_5)	0.147	0.076	*
Wealth decile 5 x Expected WT (λ_5)	0.351	0.262	

(continued on next page)

Table A7 (continued)

	Coefficient	Robust s.e.	
Wealth decile 6 ($\delta 6$)	0.094	0.092	
Wealth decile 6 x Expected WT ($\lambda 6$)	0.361	0.242	
Wealth decile 7 ($\delta 7$)	0.107	0.085	
Wealth decile 7 x Expected WT ($\lambda 7$)	0.355	0.259	
Wealth decile 8 ($\delta 8$)	0.238	0.074	***
Wealth decile 8 x Expected WT ($\lambda 8$)	0.306	0.260	
Wealth decile 9 ($\delta 9$)	0.309	0.079	***
Wealth decile 9 x Expected WT ($\lambda 9$)	0.274	0.260	
Wealth decile 10 ($\delta 10$)	0.509	0.075	***
Wealth decile 10 x Expected WT ($\lambda 10$)	0.331	0.257	
Observations	17,855		
R-squared	0.255		

Source: Our elaboration on the 2014 HFCS data. Control variables and country dummy variables are accounted for.

References

- Alvaredo, F., Garbinti, B., Piketty, T., 2017. On the share of inheritance in aggregate wealth: Europe and the USA, 1900–2010. *Economica* 84, 239–260.
- Atkinson, A.B., 1998. *Poverty in Europe*. Blackwell Publishers, Oxford.
- Azpirtarte, F., 2011. Measurement and identification of asset poor households: a cross-national comparison of Spain and the United Kingdom. *J. Econ. Inequal.* 9 (1), 87–110.
- Azpirtarte, F., 2012. Measuring Poverty Using Both Income and Wealth: A Cross-Country Comparison between the U.S. and Spain. *Rev. Income Wealth* 58 (1), 24–50.
- Basiglio, S., Rossi, M.C., van Soest, A., 2022. Subjective inheritance expectations and economic outcomes. In: *The Review of Income and Wealth*. <https://doi.org/10.1111/roiw.12621>.
- Bø, E.E., Halvorsen, E., Thorsen, T.O., 2019. Heterogeneity of the Carnegie effect. *J. Hum. Resour.* 54 (3), 726–759.
- Brandolini, A., Magri, S., Smeeding, T., 2010. Asset-based measurement of poverty. *J. Pol. Anal. Manag.* 29 (2), 267–284.
- Brown, J.R., Weisbenner, S.J., 2004. Intergenerational transfers and saving behavior. Chapter 4. In: Wise, D. (Ed.), *Perspectives on the Economics of Aging*. University of Chicago Press, pp. 181–203.
- Brown, J.R., Coile, C.C., Weisbenner, S.J., 2010. The effect of inheritance receipt on retirement. *Rev. Econ. Stat.* 92 (2), 425–434.
- Browning, M., Lusardi, A., 1996. Household saving: micro theories and micro facts. *J. Econ. Lit.* 34, 1797–1855.
- Davies, J.B., 2009. Wealth and economic inequality. In: Salverda, W., Nolan, B., Smeeding, T. (Eds.), *The Oxford Handbook of Economic Inequality*. Oxford University Press, pp. 127–149.
- Deaton, A., 1992. *Understanding Consumption*. Clarendon Press.
- Doorley, K., Pestel, N., 2020. Labour supply after inheritances and the role of expectations. *Oxf. Bull. Econ. Stat.* 82 (4), 843–863.
- Druedahl, J., Martinello, A., 2022. Long-run saving dynamics: evidence from unexpected inheritances. *Rev. Econ. Stat.* 104 (5), 1079–1095.
- Elinder, M., Erixson, O., Waldenström, D., 2018. Inheritance and wealth distribution: evidence from population registers. *J. Publ. Econ.* 165, 17–30.
- Guiso, L., Paiella, M., 2008. Risk aversion, wealth and background risk. *J. Eur. Econ. Assoc.* 6, 1109–1150.
- Hirschman, A.O., 1965. Obstacles to development: a classification and quasi-vanishing act. *Econ. Dev. Cult. Change* 13, 385–393.
- Holtz-Eakin, D., Joulfaian, D., Rosen, H.S., 1993. The Carnegie conjecture: some empirical evidence. *Q. J. Econ.* 108, 413–435.
- Jääntti, M., Sierminska, E., Van Kerm, P., 2013. The joint distribution of income and wealth. In: Gornick, J.C., Jääntti, M. (Eds.), *Income Inequality. Economic Disparities and the Middle Class in Affluent Countries*. Stanford University Press, Stanford, pp. 312–333.
- Joulfaian, D., 2006. *Inheritance and Saving*. NBER working paper no. 12569.
- Joulfaian, D., Wilhelm, M.O., 1994. Inheritance and labor supply. *J. Hum. Resour.* 29 (4), 1205–1234.
- Karagiannaki, E., 2017. The impact of inheritance on the distribution of wealth: evidence from Great Britain. *Rev. Income Wealth* 63 (2), 394–408.
- Kotlikoff, L.J., Summers, L.H., 1981. The role of intergenerational transfers in aggregate capital accumulation. *J. Polit. Econ.* 89 (4), 706–732.
- Kuypers, S., Marx, I., 2018. Estimation of joint income-wealth poverty: a sensitivity analysis. *Soc. Indic. Res.* 136, 117–137.
- Malo, M.A., Sciulli, D., 2021. Wealth transfers and labour supply: impact of inheritances and gifts by gender in Europe. *Int. J. Manpow.* 42 (8), 1450–1478.
- Márquez, E., Martínez-Cañete, A.R., Pérez-Soba, I., 2013. Wealth shocks, credit conditions and asymmetric consumption response: empirical evidence for the UK. *Econ. Modell.* 33, 357–366.
- Modigliani, F., 1988. The role of intergenerational transfers and life cycle saving in the accumulation of wealth. *J. Econ. Perspect.* 2 (2), 15–40.
- Nekoei, A., Seim, D., 2023. How do inheritances shape wealth inequality? Theory and evidence from Sweden. *Rev. Econ. Stud.* 90 (1), 463–498.
- OECD, 2013. *OECD Framework for Statistics on the Distribution of Household Income, Consumption and Wealth*. OECD Publishing, Paris.
- Suari-Andreu, E., 2023. Labour supply, retirement, and consumption effects of older Europeans to inheritance receipt. *Empir. Econ.* 64, 33–75.
- Weil, D.N., 1996. Intergenerational transfers, aging, and uncertainty. In: Wise, D. (Ed.), *Advances in the Economics of Aging*. University of Chicago Press (Chapter 10).
- Wolff, E.N., 2002. Bequests, savings and wealth inequality. *American Economic Association Paper and Proceedings* 92, 260–264.
- Wolff, E.N., Gittleman, M., 2014. Inheritances and the distribution of wealth or whatever happened to the great inheritance boom? *J. Econ. Inequal.* 12, 439–468.