When wealth hurts: Inheritances and the health of older Europeans

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ARTICLE INFO

ABSTRACT

We study the impact of inheritances on physical and mental health outcomes, using a longitudinal, cross-country dataset covering 16 European countries over 2004–2017. The results show that the receipt of an inheritance is negatively associated with BMI and being obese among women. We also find evidence of an increase in the probability of experiencing depressive symptoms among women following an inheritance. When we account for individual heterogeneity, we find that the receipt of an inheritance increases the probability of being depressed by 2.3 percentage points among women. This finding is driven by unexpected inheritances and female heirs who are less educated, unmarried, unemployed, and living in Southern European countries. In addition, the receipt of an inheritance increases the probability of women engaging in vigorous and moderate physical activities by 2.6 and 2 percentage points, respectively.

Introduction

Changes in the demographic structure of countries, due to population ageing, increased longevity, and declining fertility, pose major challenges for many countries (Eurostat, 2020, 2025; OECD, 2022). Considering the current demographic transition in Europe, a major concern for policymakers is the health of older adults. This demographic change requires measures that promote healthy ageing and alleviate pressure on public finances. Nevertheless, the figures do not suggest an increase in the proportion of life spent in good health during these later years (WHO, 2024a). The concept of healthy ageing includes the absence of diseases such as mental health issues (i.e., depression, loneliness, anxiety) or weight problems (obesity), chronic diseases (cardiovascular diseases, cancer or type 2 diabetes), or cognitive decline (dementia). This approach proposes certain measures to ensure optimal physical, mental, and social well-being, such as regular exercise, well-balanced nutrition, not smoking, moderate alcohol consumption, or proper sleep.

Numerous studies indicate a positive relationship between socioeconomic status and health (Chetty et al., 2016; Mathieu-Bolh, 2022; Kumar et al., 2016; Lei et al., 2014; Merino Ventosa and Urbanos-Garrido, 2016; Myck et al., 2025; Salmasi and Celidoni, 2017), suggesting a socioeconomic-health gradient. Recent studies examine the channels behind this relationship, focusing on health impacts of economic resources by exploiting exogenous variations in income or wealth. Evidence generally finds that positive unexpected income or wealth shocks improve self-reported health (Apouey and Clark, 2015; Carman, 2013; Gardner and Oswald, 2007; Kim and Koh, 2021), and these improvements can be long-lasting in some contexts (Lindqvist et al., 2020).

Although previous research has analyzed unexpected wealth changes and health outcomes, results remain inconclusive and mostly limited to single countries, restricting external validity. This matters, as obesity and mental health disorders are major public health issues in later life. Obesity more than doubled worldwide between 1990 and 2022 (WHO, 2024b), and weight typically increases with age (Eurostat, 2019). Similarly, mental health disorders, including depression and anxiety, have also increased, especially among older adults, affecting well-being and health systems globally (WHO, 2023).

Considering current demographic and health trends, understanding how economic factors and incentives influence both the physical and mental health of older adults is essential for mitigating the obesity epidemic and addressing the rising burden of mental health disorders. A comprehensive approach to improving late-life well-being could help expand healthy life expectancy, reduce medical care costs, and promote a better quality of life in ageing populations.

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Inheritances are a source of wealth (Crawford and Hood, 2016; Nekoei and Seim, 2023; Wei and Yang, 2022) that may affect health through several channels. According to the human capital model of health demand (Grossman, 1972, 2000), two scenarios arise. On one hand, inheritances provide more income, relaxing budget constraints and possibly increasing demand for healthier, less calorie-dense foods, and freeing up time for health-promoting activities (e.g., exercise, volunteering, house repairs, gardening, rest, cooking at home), especially for those in sedentary jobs.[1] On the other hand, inheritances can also lead to unhealthy behaviors (van Kippersluis and Galama, 2014) like higher alcohol consumption and smoking, which harm health. Increased resources can expand leisure, reducing incentives to invest in health for productivity or earnings. Thus, individuals may become less active, as work often provides much of their physical activity (Dave et al., 2008).

Within this framework, this paper addresses the relationship between inheritance receipt and physical and mental health, using data from the Survey of Health, Ageing and Retirement in Europe (SHARE), from 2004 to 2017, covering 16 countries. Inheritances constitute a particularly well-suited variation in household economic resources, as they provide a comprehensive understanding of how additional non-labor income — which are not tightly linked to work but expands budget constraints — influences health behavior. After controlling for inheritance expectations and observed characteristics of individuals, we assume that the receipt of an inheritance constitutes a wealth shock. Given the panel dimension of our dataset, we also control for individual unobserved heterogeneity. This relationship is of particular interest because it explores the role of wealth in shaping health outcomes, shedding light on how financial resources may alter healthy behaviors. Moreover, given that inheritances often occur later in life, they offer a unique opportunity to examine how mid-to-late life changes in wealth can influence health metrics. Understanding this dynamic is especially relevant for policymaking, as wealth redistribution through inheritances may have unintended consequences for public health, potentially exacerbating or mitigating obesity- and depression-related issues among older adults.

Our results suggest that inheritances have an impact on BMI and depression. Specifically, receiving an inheritance is negatively associated with BMI and being obese among females, whereas it is positively related to depressive symptoms. Quantitatively, the receipt of an inheritance is associated with a decrease of 0.9 percent in BMI and 1.9 percentage points in the probability of being obese among women. On the other hand, inheriting is associated with an increase of 0.08 standard deviations in the EURO-D depression scale and of 3 percentage points in the probability of being depressed among women. When we control for unobserved time-invariant heterogeneity, receiving an inheritance increases the EURO-D depression scale by 0.059 standard deviations and the probability of experiencing depressive symptoms by 2.3 percentage points among women. The adverse impact of inheritances on mental health appears not to be driven by grief-related effects coming from older parents who die, whereas only unexpected inheritances show significant effects. Finally, the results are driven by women who are unemployed, unmarried, have low educational attainment levels, and live in Southern Europe. Consequently, the analyses point to the importance of gender behind the estimates, suggesting that only a subset of the overall population is likely to change their health behavior in response to wealth shocks. This result speaks to the various incentives to improve health status among women and men. We examine some potential channels for these relations and show that receiving an inheritance increases participation in vigorous and moderate physical

activities only among women.

To the best of our knowledge, the studies closest to our work are Kim and Ruhm (2012), Carman (2013), and Au and Johnston (2015). Kim and Ruhm (2012) and Au and Johnston (2015) study the effects of inheritances on individual BMI in the US and Australia, respectively. Kim and Ruhm (2012) do not document any statistically significant effect of household inheritances on obesity, using pooled data from the Health and Retirement Study (HRS). Au and Johnston (2015), with a focus on specific gender effects and younger cohorts, show a positive effect of a composite index for lottery wins and inheritances on individual BMI among women, exploiting the panel structure of the Household, Income and Labour Dynamics in Australia (HILDA). In contrast, Carman (2013) shows a negative effect of inheritances on general health status in men relative to women, using the Panel Study of Income Dynamics (PSID) and estimating individual fixed-effects models.

The contributions of this paper are threefold. First, we contribute to the literature by examining how inheritances correlate with health outcomes in European countries, for which there is currently no evidence. While prior studies have looked at single-country datasets, ours is the first to use a cross-national panel survey of a total of 16 countries (15 European countries and Israel). We use a large, cross-national, representative panel survey — harmonized and standardized — and we provide estimates that are valid for several European countries, overcoming the external validity issues of prior research based on single-country datasets (Au and Johnston, 2015; Carman, 2013; Kim and Ruhm, 2012).

Second, we examine whether there is heterogeneity in our results across different subgroups. We pay attention to certain individual and household characteristics that may affect our estimates, and report heterogeneity depending on current employment status, marital status, education level, age, and institutional setting of respondents. These results can be used by policymakers to address health problems among different groups.

Finally, we explore the possible mechanisms through which inheritances could contribute to health, such as healthy lifestyles (i.e., frequency of physical activity), addictive risky behaviors (i.e., smoking and drinking), and dietary changes (i.e., amount spent on food, frequency of eating fruits and vegetables, and the consumption of home-produced foods). These latter results contribute to the limited body of research on time use and consumption responses to wealth shocks, which has mostly focused on labor supply based on the Carnegie effect (Bø et al., 2019; Doorley and Pestel, 2020) or on shocks to house prices as a driver of consumption (Cristini and Sevilla, 2014; Lee, 2023).

The rest of the paper is organized as follows. In Section 2, we present a review of the literature. Section 3 describes the data, sample criteria, and variables used in the analysis. In Section 4, we detail our econometric specification, and Section 5 reports our main results. Finally, Section 6 concludes.

Literature review

Prior research has studied the effects of a range of unexpected income and wealth shocks on individual health status, via psychological, mental, and physical health measures. For measures of unexpected income and wealth shocks, most studies have focused on lottery wins and inheritances. In this section, we present a literature review of the most relevant works on the health-related impacts of inheritances and lottery wins. First, we review the identification strategies used by previous studies to identify inheritances and lottery as unexpected shocks, and we later move on to the results obtained by the closer works.

Inheritances and wealth shocks

Different assumptions must be made to properly identify lottery wins and inheritances as unexpected and to disentangle the effect of an exogenous increase in income and wealth on individual health status net

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[1] The receipt of an inheritance could encourage adults to exit the labor force and adjust their retirement behavior, especially at older ages close to retirement (Belloc et al., 2025a; Blau and Goodstein, 2016; Kindermann et al., 2020). On the other hand, regarding elder care, inheritances are closely related to the death of a parent, and this may relax time constraints for adult children.

of endogeneity concerns. On the one hand, lottery wins are completely random events, once lottery ticket spending is accounted for (i.e., the frequency of playing the lottery). This is known as the lottery-tickets (LT) bias in the well-being literature (for more details, see Kim and Oswald (2021)). Unfortunately, this information is not collected in many surveys, including well-known panel datasets such as the British Household Panel Survey (BHPS) or the German Socio-Economic Panel (SOEP).

Alternatively, researchers using household panel surveys adopt individual fixed-effects models under the assumption that lottery ticket purchases are relatively constant over time. These models identify the effect of lottery wins on health net of unobserved, time-invariant individual heterogeneity in preferences, which may otherwise lead to endogeneity issues. This approach also helps to overcome potential omitted-variable bias that may influence both income and health, as well as the marginal propensity to play the lottery, and accounts for likely individual heterogeneity between lottery winners and non-winners in both observable and unobservable characteristics (Apouey and Clark, 2015; Costa-Font and Györi, 2023; Raschke, 2019; van Kippersluis and Galama, 2014).

By contrast, inheritances are received by a wide range of the population and are, on average, larger than lottery winnings (Doorley and Pestel, 2020; van Kippersluis and Galama, 2014). Nevertheless, it is well known that inheritances can be anticipated some time in advance, so their effect can appear prior to receipt (Adams et al., 2003; Bø et al., 2019; Carman, 2013). Within this context, inheritance expectations should be controlled for in the regressions. Unlike lottery ticket purchases, this information is readily available in ageing surveys such as the HRS, the English Longitudinal Study of Ageing (ELSA), or SHARE, which focus on older people who are more likely to inherit.

Lottery wins and health dynamics

As regards studies of lottery wins and health measures, Gardner and Oswald (2007) study the link between income and well-being and show that medium-sized lottery wins in the UK positively affect psychological health, by exploiting a General Health Questionnaire (GHQ) score based on 12 questions (GHQ-12) that measure mental well-being. Specifically, these authors find that women who receive a lottery win of £1000 or more in the BHPS exhibit an improvement in mental health of 1.4 GHQ points — on a 36-point Likert scale — two years after the win, and a larger improvement is observed for men. Extending those findings, Apouey and Clark (2015) analyze the impact of lottery wins on both mental and physical health using the BHPS and report a positive effect on mental health, supporting the findings of Gardner and Oswald (2007). More specifically, these positive effects concentrate on happiness, life satisfaction, concentration, sleep quality, and absence of pressure.

In Germany, Raschke (2019) uses the SOEP for the survey years 2000–2011 and shows that mental health declines contemporaneously after a lottery win (i.e., a decrease of 22 percent of a standard deviation in an index of mental health, where higher values indicate better mental health, and an increase of 7.7 percentage points in the probability that the individual evaluates their own health status as bad or very bad). These effects are particularly driven by individuals with low education and low financial literacy (i.e., those who do not own stocks, bonds, or other similar financial assets before winning the lottery). The mental health effect is short-lived and disappears after a year, whereas the effect on the probability of reporting bad health persists up to three years later.

These three lottery studies focus on short-run health responses to lottery wins (i.e., up to three years after the prize). Lindqvist et al. (2020) provide new insights into these relationships in the long run and study psychological well-being responses up to 22 years after a lottery event, using data from a survey of large lottery players in Sweden (3362 players). The authors focus on life satisfaction and show a positive effect of large ($100,000) lottery wins on life satisfaction of around 0.037

standard deviation units –on an 11-point scale– and that this effect persists for over a decade and does not fade with time. By contrast, the effects on happiness and an index of mental health (GHQ-12) –two distinct affective measures reflecting how frequently respondents experience a range of pleasant and unpleasant emotions– are smaller (around 0.016 and 0.013, respectively) and not statistically significant at standard levels. These findings suggest that income effects differ between affective and cognitive well-being measures.

Kim and Koh (2021) use pooled data from the Singapore Life Panel (SLP) for Singaporeans aged 50–70 from the November 2016 and 2017 survey waves, where information about lottery ticket purchases is available. They find a positive effect of a S$10,000 (US$7245 or €6196 at the time of writing) lottery win on individual self-reported health and on the probability of reporting excellent, very good, or good health — with standard deviation increases of 0.18 and 0.15, respectively. These effects are larger among those under age 55, who are not allowed to withdraw a portion of their pension wealth and thus experience stronger liquidity constraints.[2]

For studies of lottery wins and BMI, we can cite Cesarini et al. (2016) and Costa-Font and Györi (2023). Cesarini et al. (2016) focus on children's weight and, using their well-known Swedish lottery players dataset, find that lottery wins reduce childhood obesity risk at the age of 18. More recently, Costa-Font and Györi (2023) exploit the panel nature of the BHPS and estimate individual fixed-effects models, showing that lottery wins lead to a contemporaneous increase in BMI of 0.246 units, and that a £1000 lottery win in the previous year reduces BMI by 0.414 units and the probability of being overweight by up to 3 percentage points. In final heterogeneity analyses, the authors find that a contemporaneous £1000 lottery win among low-educated individuals reduces the probability of being overweight by 4.6 percentage points. These estimates are also heterogeneous depending on working hours, since those who work more than 35 h per week experience an increase in both BMI and the likelihood of being overweight following a contemporaneous £1000 lottery win, while after a year an individual's BMI decreases slightly.

Inheritances and health outcomes

To the best of our knowledge, only three studies have specifically focused on inheritances and health measures: Kim and Ruhm (2012), Carman (2013), and Au and Johnston (2015). Kim and Ruhm (2012) study how inheritances are related to mortality, health status, and health behaviors, using data from the first eight waves of the HRS in the US, for respondents born from 1931 to 1941. For obesity indicators, the authors find that inheritances over $10,000 have a negative effect on two indicators—obesity and severe obesity—although these effects are not statistically significant. Au and Johnston (2015) use data from HILDA from 2006 to 2011 for persons aged 30–70, showing that wealth improvements, through a composite indicator of inheritances and lottery wins during the past 12 months, increase weight by 725 g, BMI by 0.9 percent, and obesity by 2.1 percentage points for women, estimating individual fixed-effects models. Furthermore, this effect differs by initial wealth and weight: if the wealth shock is received by initially poor and obese women, weight and BMI increase by 4.4 kg and 4.7 percent, respectively, with the latter effect persisting up to 37 months after the wealth shock. On the other hand, Carman (2013) uses the PSID in the US from 1984 to 2007 and shows a positive relationship between inheritance receipt (in the last one, two, or five years) and health status. However, no effect appears in the individual fixed-effects specification, suggesting no change in health due to inheritance receipt. In additional heterogeneity analyses, the author finds that receiving an inheritance one year ago decreases the log odds of better health status by 22 percent,

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[2] To the best of our knowledge, this dataset represents a uniquely publicly available source of information on lottery ticket purchases.

and an inheritance in the last two years decreases the log odds by 12.2 percent for men relative to women.

Consequently, there are only two studies that have explicitly focused on inheritances and BMI in the US and Australia, and one study from the US focusing on inheritances and general health status. Against this background, we contribute to this strand of the literature by taking a broad perspective and focusing on 15 European countries plus Israel, for the first time in the literature. We therefore do not focus on one specific country, as other studies do, which gives external validity to our findings. We limit our analysis to older individuals, who are an emerging population group in contemporary societies and are generally more likely to inherit than younger individuals (Bø et al., 2019; Carman, 2013; Sila and Sousa, 2014), as done in Kim and Ruhm (2012) for the US. Finally, the rich breadth of information covered by SHARE allows us to control for inheritance expectations, which is important for mitigating potential omitted variable biases.

Other income and wealth shocks

Other authors have recently analyzed different income and wealth shocks as exogenous sources of variation in economic resources (An et al., 2025; Cotti and Simon, 2018; Fichera and Gathergood, 2016; Schwandt, 2018; Shi, 2022; Xu and Wang, 2022) to analyze the link between health and socio-economic status. For instance, An et al. (2025) study the transmission of income shocks to subjective well-being in Korea, resembling the econometric framework proposed by Blundell et al. (2008), and show that permanent income changes have a substantial impact on life satisfaction. In contrast, transitory income shocks have little impact. Focusing on stock market fluctuations and the HRS over the years 1998–2011, Schwandt (2018) obtains that wealth shocks positively impact physical health, self-reported health, and mental health, whereas Cotti and Simon (2018) show a negative effect of a stock market crash on child reported health status. For other components of wealth, Fichera and Gathergood (2016) use the BHPS and document that house price increases improve self-assessed health among homeowners in the UK, consistent with Shi (2022) in China. In a distinct focus, Horn et al. (2017) and Liu et al. (2024) find that increases in minimum wages negatively affect health in the US and China, whereas Kim and Koh (2020) find that early access to pension wealth significantly improves self-reported overall health in Singapore. In contrast, Schnalzenberger (2016) obtains no significant health effects of pension income in Austria.

Contribution with respect to existing research

This paper contributes to the analysis of wealth shocks and health outcomes. Specifically, our analysis contributes to a growing literature that uses inheritances and lottery winnings as plausibly exogenous shocks to income and wealth to assess their impact on health, both physical and mental, in aging population. Most prior research has relied on lottery wins (Apouey and Clark, 2015; Costa-Font and Győri, 2023; Gardner and Oswald, 2007; Lindqvist et al., 2020; Raschke, 2019), given their random nature. However, these studies face potential biases arising from unobserved characteristics related to lottery participation, as many surveys lack data on lottery ticket spending (Kim and Oswald, 2021).

In contrast, our paper focuses on the receipt of inheritances, which, while not purely random, are more widespread across the population and, conditional on expectations and observed characteristics, can serve as unexpected wealth shocks (Belloc et al., 2025a). Previous research on inheritances and health has focused on single-country settings (Au and Johnston, 2015; Carman, 2013; Kim and Ruhm, 2012), and has reached mixed conclusions, suggesting that the effect of wealth shocks on health may vary across institutional contexts and demographic groups.

Our work advances this literature by addressing several gaps. First, we provide the first cross-national European evidence on the relationship between inheritances and health, which allows us to test whether the effects observed in prior single-country studies hold across a diverse

institutional landscape. In doing so, we first study the effect of inheritances on physical and mental health outcomes among 16 European countries, and we then study the validity of our pooled results across European countries using a well-established classification of countries based on 4 groups (Belloc et al., 2025a; Fawaz and Mira, 2023; Trevisan and Zantomio, 2016). Besides, the longitudinal dimension of our dataset allows us to address unobserved individual heterogeneity that may bias cross-sectional estimates on wealth and health (Kim and Koh, 2021; Kim and Oswald, 2021).

Second, we explicitly control for inheritance expectations, which helps to isolate the effect of realized inheritances from anticipation effects, a concern often noted in the literature (Brown et al., 2010; Doorley and Pestel, 2020) and not effectively addressed in some related studies (Au and Johnston, 2015; Kim and Ruhm, 2012). According to the life-cycle model, forward-looking heirs should have changed their healthy lifestyles in advance of experiencing the change in household resources if inheritances were fully expected, so that no effect should be observed once they are realized (Jappelli and Pistaferri, 2010).

Finally, we investigate potential mechanisms underlying the health effects of receiving an inheritance, such as physical activity, dietary behavior, and risky health behaviors. Consequently, we generally contribute to the literature on inheritances, on the one hand, and time use and consumption behaviors, on the other hand. This literature has mostly focused on labor supply decisions (Belloc et al., 2025a; Blau and Goodstein, 2016; Brown et al., 2010; Malo and Sciulli, 2021) and consumption of nondurable and essential goods such as food (Suari-Andreu, 2023) due to data limitations (Belloc et al., 2025b).[3]

Data

We use data from SHARE,[4] a representative, cross-national panel survey conducted every two years on average, that contains the largest body of data on older individuals in 28 European countries and Israel, from 2004 until 2021. It is coordinated by the Munich Center for the Economics of Aging, with technical support from CentERdata at Tilburg University, and is similar to the HRS in the US and ELSA in the UK. The target population of the survey is individuals aged 50 or older and their spouses or partners, and data is collected through homogeneous computer-assisted personal interviews using questionnaires that are ex-ante standardized to allow for cross-country comparisons.[5]

SHARE collects harmonized information about demographics,

physical and mental health, current socio-economic status, social networks, family relationships, financial transfers, and expectations, for respondents aged 50 and above and their spouses or partners, irrespective of their age, in a representative sample of the European population. All respondents who were interviewed in any previous wave are part of the longitudinal sample and are traced and re-interviewed. Consequently, this survey is particularly well suited for studying European countries and, because it focuses on older individuals who generally have a greater chance of receiving inheritances, for our analysis.

The survey is organized into different data modules per wave (up to 32 modules per wave), and we use data from survey waves 1 through 7, excluding the third wave of the survey (see Bergmann et al. (2019) for response and retention rates during those specific survey waves).[6] For this analysis, we impose minimal sample restrictions. Specifically, we keep individuals aged 50 years and older at the time of their first interview and drop those observations with missing values on the set of key variables, which leaves a sample of 108,334 observations (person × wave), corresponding to 37,855 individuals (16,735 males and 21,120 females) who are observed for at least two consecutive waves (2.9 waves on average).[7] The analysis covers Austria, Belgium, Czech Republic, Denmark, Estonia, France, Germany, Greece, Israel, Italy, the Netherlands, Poland, Slovenia, Spain, Sweden and Switzerland.[8]

For health measures, we initially focus on BMI and depression. For BMI, we use the information provided by the survey on individual weight and height, dividing a respondent's weight in kilograms by the square of height in meters, $BMI = kg/m^2$. Weight is obtained from the question "Approximately how much do you weigh?", while height is obtained from "How tall are you?". (These two self-reported variables are available in all regular SHARE waves, enabling the calculation of BMI.) We define other standard weight statuses, namely a dummy variable that identifies individuals who are overweight, and a dummy variable that identifies individuals with obesity, following the guidelines of the World Health Organization (WHO) for adults.[9]

Besides, to measure the prevalence and risk of depression, we use the 12-item EURO-D scale on depression, which is calculated by adding up 12 items measuring the presence of problems with depression, pessimism, suicidality, guilt, lack of sleep, lack of interest, irritability, lack of appetite, fatigue, concentration problems, lack of enjoyment, and tearfulness. Each individual was asked to indicate for each symptom whether it was present (1) or absent (0) in the last month, so that higher values indicate worse mental health. This scale runs from a minimum of 0 (not depressed) to a maximum of 12 (very depressed), and we use the cut-off point of four or more to define a dummy variable denoting depressed individuals (Prince et al., 1999) from the original EURO-D depression scale.[10]

Our key explanatory variable is the receipt of an inheritance since the previous interview. For inheritance receipt, we define a dummy variable that takes the value 1 for those households who have received an inheritance larger than 5000 euros since the previous interview, and 0 otherwise. This information is collected through the Financial Transfers (FT) Module, completed by the financial respondent of the household, who answers the question: "Not counting any large gift we have already talked about, have you [or your husband/wife/partner] ever received a gift or inherited money, goods, or property worth more than 5000 euros?". This variable is then defined at the household level, as has been done in prior research using the HRS (Kim and Ruhm, 2012; van Kippersluis and Galama, 2014), the PSID (Carman, 2013), the SOEP (Doorley and Pestel, 2020), and SHARE (Ferrari, 2020; Suari-Andreu, 2023). To properly define inheritance receipt between survey waves, we also use the question: "In which year did you [or your husband/wife/partner] receive this gift or inheritance?", to avoid double counting of specific transfers.[11]

To control for signs of anticipation, we use the Expectations (EX) Module, which explores each respondent's inheritance expectations, and ask the question: "Thinking about the next ten years, what are the chances that you will receive any inheritance, including property and other valuables?". The potential answers range from 0 to 100, where 0 indicates no chance of inheriting and 100 means that the person is absolutely certain that an inheritance will be received during the next 10 years. Other answers include "don't know" or "refuse", and individuals with such responses are eliminated from the final sample. The question on inheritance expectations is available from waves 1 to 4. From wave 5 onward (a 6-year period on average until wave 7), this question was no longer asked in SHARE. We assign the last observation of inheritance expectations per individual to the next waves in which that same individual is observed, since the question refers to expectations over the next 10 years. We must then acknowledge a limitation: although we are covering a 6-year timespan, inheritance expectations may change over time, and we cannot account for that change. Our sample is therefore restricted to individuals who enter at any time between waves 1 and 4, when information on inheritance expectations is available.

Other than these key variables, we control for certain explanatory variables that may be related to health and could be correlated with inheritances, based on prior literature (Au and Johnston, 2015; Carman, 2013; Kim and Ruhm, 2012; Raschke, 2019), to minimize any potential omitted variable bias in the estimates. These variables include respondent's gender, age, highest level of education attained, and employment status. For gender, we define a dummy that takes the value 1 if the respondent is a woman, and 0 if the respondent is a man. We define respondents' age as a continuous variable measured in years. The maximum level of education is based on the 1997 International Standard Classification of Education (ISCED-97), divided into 7 dummy variables: Pre-primary education (ISCED-97 0), Primary education or first stage of basic education (ISCED-97 1), Lower secondary or second stage of basic education (ISCED-97 2), Upper secondary education (ISCED-97 3), Post-secondary non-tertiary education (ISCED-97 4), First stage of tertiary education (ISCED-97 5), and Second stage of tertiary education (ISCED-97 6). The reference category for educational attainment is lack of education (i.e., Pre-primary education; ISCED-97 0). We also control for employment status and define a dummy variable that takes the value 1

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[6] The third wave, commonly known as SHARELIFE, is excluded because it is dedicated to constructing life histories of SHARE respondents and does not contain information for the key variables used in our analysis.

[7] We consider wave 2 and wave 4 as consecutive waves and assume that the relationship between a two-year period (waves 1 and 2, 4 and 5, 5 and 6, 6 and 7) is the same as a four-year period (waves 2 and 4). The number of observations dropped due to respondents aged under 50 is minimal—about 5,762 observations from a total of 270,754 pooled observations for waves 1–7. We impose the restriction of (at least) two consecutive periods to properly interpret inheritances as a shock, as detailed below.

[8] The SHARE collects information for a total of 28 countries during the period of analysis. However, we exclude 12 countries due to missing data on key variables (inheritance expectations) or lack of longitudinal variation across waves (most of these countries are incorporated in wave 7 of the survey). The countries excluded are Bulgaria, Croatia, Cyprus, Finland, Hungary, Latvia, Lithuania, Luxembourg, Malta, Portugal, Slovakia, and Romania.

[9] We use the standard cutoffs provided by the WHO, which indicate that individuals with $BMI \geq 30$ are classified as obese, and those with $BMI \geq 25$ are classified as overweight, including those who are obese. For more details, we refer to https://www.who.int/health-topics/obesity#tab=tab_1 (accessed in April 2025).

[10] We also examine other health outcomes, such as self-rated general health status, life satisfaction, or happiness, but the results show no significant effects. These additional results are available upon request.

[11] SHARE also provides information regarding inheritance amounts ("What was the value of this gift or inheritance at the time you [or your husband/wife/partner] received it?"), but this is only available for inheritances received in waves 1 and 2.

for those whose current situation is employed or self-employed (including working for a family business), and 0 if the respondent is not working, either because they are inactive (e.g., retired, permanently sick or disabled, homemaker, other) or unemployed.

At the household level, we define household income, household wealth (net worth), respondent's marital status, the number of household members, the number of children, and the number of living brothers and sisters. Total household income is obtained by summing household earnings from employment and self-employment, annual old-age or early retirement pensions, annual private occupational pensions, annual disability pensions and benefits, annual unemployment benefits and insurance, annual payments from social assistance, sickness benefits and pensions, and interest or dividends received from bank accounts, bonds, stocks, or mutual funds. Household wealth is the sum of all financial assets (e.g., bank accounts, stocks, bonds) and non-financial assets (e.g., housing, car, own businesses, other real estate), net of debts.[12] For marital status, we define a dummy taking the value 1 for individuals who are married or in a partnership (0 if never married, divorced, or widowed).

Table 1
Summary statistics.

	Males		Females	
	Mean	Std. Dev.	Mean	Std. Dev.
Dependent variables				
BMI	27.188	4.127	26.746	4.952
Overweight	0.690	0.463	0.592	0.491
Obese	0.208	0.406	0.224	0.417
EURO-D scale on depression	1.877	1.957	2.720	2.319
Depressed (EURO-D scale $\geq$ 4)	0.178	0.383	0.318	0.466
Independent variables				
Inheritance since the previous wave	0.056	0.230	0.053	0.223
Inheritance expectation	15.552	30.568	14.614	29.758
Inheritance expectation > 0	0.462	0.499	0.446	0.497
Age	66.667	9.050	66.572	9.270
Pre-primary education	0.022	0.148	0.030	0.171
Primary education	0.185	0.389	0.234	0.423
Lower secondary education	0.171	0.376	0.192	0.394
Upper secondary education	0.346	0.476	0.309	0.462
Post-secondary education	0.044	0.205	0.046	0.208
First stage of tertiary education	0.223	0.416	0.185	0.389
Second stage of tertiary education	0.008	0.089	0.004	0.064
Employed	0.276	0.447	0.215	0.411
Household income (/1000)	1,942.604	138.000	1,738.786	128.000
Household net worth (/1000)	809.229	67.700	977.739	83.100
Married	0.812	0.391	0.640	0.480
Household size	2.257	0.983	2.015	0.971
Number of children	2.249	1.381	2.252	1.382
Number of living brothers	1.232	1.269	1.170	1.197
Number of living sisters	1.297	1.230	1.334	1.282
Number of observations (person-wave)	**47,344**		**60,990**	
Number of individuals	**16,735**		**21,120**	

Notes: Authors' calculations. Data come from the Survey of Health, Ageing and Retirement in Europe (SHARE), waves 1–7. Sample is restricted to individuals aged + 50 years old with at least two consecutive waves.

Table 1 provides the summary statistics for the variables in our sample, by gender. The mean BMI is 27.188 for males and 26.746 for females, both slightly exceeding the overweight threshold of 25. Approximately 69 % of males and 59.2 % of females are overweight, while 20.8 % of males and 22.4 % of females are at risk of obesity. The average EURO-D depression score is 1.877 among males, whereas for females it is 2.720. Additionally, around 17.8 % of males and 31.8 % of females are classified as depressed. Regarding inheritance receipt, 5.6 % of males and 5.3 % of females have received an inheritance since the previous wave, while the average inheritance expectation is 15.552 % for males and 14.614 % for females.

The average age of males and females is comparable, both 66 years. In terms of educational attainment, 2.2 % of males and 3 % of females have a pre-primary education level, 18.5 % and 23.4 % a primary education level, 17.1 % and 19.2 % a lower secondary education level, 34.6 % and 30.9 % an upper secondary education level, 4.4 % and 4.6 % a post-secondary education level, 22.3 % and 18.5 % have completed the first stage of tertiary education, and 0.8 % and 0.4 % have attained the second stage of tertiary education. The average employment rate is 27.6 % for males and 21.5 % for females. The average household income is €1,942,604 for males and €1,738,786 for females, while the mean household net worth is €809,229 for males and €977,739 for females. On average, 81.2 % of males are married, while the percentage for females is 64 %. Finally, the average household size, as well as the average number of children and siblings per household, is approximately 2.

Econometric strategy

To study how inheritances relate to physical and mental health, we estimate, separately by gender, the following linear regression model using Ordinary Least Squares (OLS):

$$Y_{ijct} = \beta_0 + \beta_1 INHERITANCE_{ijct} + \beta_2 EXPECTATION_{ijct-1}$$

$$+ X'_{ijct}\beta_3 + \xi_c + \mu_t + \varepsilon_{ijct} \quad (1)$$

where i denotes the individual, j refers to the household, c to the country of residence, and t the survey wave. The dependent variable, Y_{ijct}, represents either the log of BMI, the dummy variable for being overweight, the dummy variable for being obese, the EURO-D depression scale, or the dummy variable for being depressed of individual i in household j of country c at time t.[13] $INHERITANCE_{ijct}$ is a dummy variable taking the value 1 if the corresponding individual received an inheritance since the previous wave, and value 0 otherwise, and $EXPECTATION_{ijct-1}$ represents inheritance expectations, dichotomized in a dummy taking value 1 if the expected probability of receiving an inheritance in the next 10 years (one period lagged, $t-1$) is greater than 0, and value 0 otherwise (Brown et al., 2010; Suari-Andreu, 2023).[14] Because of the nature of the dependent variables, we use linear probability models for simplicity when the dependent variable is dichotomous, although the results using logit and probit models are similar and yield comparable conclusions.

X_{ijct} is a vector of observable characteristics, including the control variables that may be relevant for the dependent variables and correlated with inheritance receipt, namely age and age squared, education, employment status, log household income (a poor person is much less

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[12] The values for income and wealth are missing for many respondents, as is frequent with this type of information from surveys. We use the imputation values provided by the survey to minimize non-response errors and maintain a large dataset for estimation purposes.

[13] BMI is defined in logarithms, following Au and Johnston (2015), Salmasi and Celidoni (2017), Triaca et al. (2020), Aranda et al. (2021), and Sato (2021), among others, to reduce the effect of outliers. On the other hand, we standardize the EURO-D depression score to have a mean of 0 and a standard deviation of 1.

[14] According to Table 1, about 46.2 % of males and 44.6 % of females expect to inherit in the future. This can be related to current forced heirship rules in Europe, which limit donors' freedom and set a fixed amount of assets that must be given to their children (OECD, 2021). These systems also apply in countries with no taxes on inheritances.

likely to receive an inheritance), log wealth (lagged one period), marital status, household size, number of children, and number of living brothers and sisters.[15] ξ_c denotes a vector of country fixed effects to control for national legislation, such as inheritance laws (OECD, 2021), and any unobserved, time-invariant country-specific heterogeneity, such as cultural features (Israel is the reference country); μ_t represents wave fixed effects (wave 7 is the reference wave), and ε_{ijct} represents unmeasured factors. For instance, although inheritances are charged on heirs depending on the degree of kinship with the deceased, our sample encompasses countries with different inheritance laws, ranging from countries that do not apply taxes on inheritances, such as Austria, Czech Republic, Estonia, Israel, or Sweden, to countries with high revenues from inheritances, such as Belgium and France. All the estimates include robust standard errors clustered at the individual level to account for heteroskedasticity and serial correlation of the error terms.

In all specifications, the coefficient of interest is β_1, which represents how the realization of receiving an inheritance relates to the dependent variable. Furthermore, as we control for whether the respondent expects to receive an inheritance in the future, we account for and net out estimates from anticipation effects, i.e., from whether individuals change their health behavior in anticipation of receiving inheritances. Specifically, in our identification strategy, we consider that an individual who receives an inheritance, conditional on past inheritance expectation, experiences a shock to their wealth, as this timing is largely unexpected. Consequently, we interpret the coefficient β_1, net of inheritance expectations that are captured by β_2, as the relationship between the inheritance realization, on the one hand, and an individual's health outcome, on the other.

Results

Main estimates

Table 2 shows the results of estimating Eq. (1) for our measures of physical and mental health, separately by gender. We focus on the key parameters of interest, i.e., those related to inheritance receipt. For BMI (Columns 1 and 2), overweight (Columns 3 and 4), and obesity (Columns 5 and 6), we observe a negative relationship with inheritance receipt since the previous wave, whereas the EURO-D depression scale and being depressed are positively related to the receipt of an inheritance since the previous wave. However, not all the coefficients are statistically significant at standard significance levels.

In Column 2 of Table 2, we find that inheritance receipt is related to a decrease of 0.9 percent in BMI among women, and this coefficient is statistically significant at the 5 % level. In terms of magnitude, given that the average BMI for females in the sample is 26.746, this suggests an average decrease of 0.24 units in BMI among females. However, the coefficient for males is not statistically significant, suggesting that the receipt of an inheritance is not related to changes in BMI among males.

For overweight, we find that the receipt of an inheritance is associated with a decrease of 1.8 percentage points in the probability of being overweight among females, with this coefficient being statistically significant at the 10 percent level, whereas the estimated coefficient for males is not statistically significant. In the estimates of the probability of being obese, we document a statistically significant negative relationship between inheritances and obesity status only among females. Quantitatively, the receipt of an inheritance is related to a 1.9 percentage point decrease in the probability of being obese among females, with this coefficient being statistically significant at the 5 % level. Consequently, results show significant differences among individuals in the sample, and females appear to reduce their weight after the receipt of an inheritance.

In Columns (7) and (8) of Table 2, we examine the relationship between inheritance receipt and mental health outcomes, as measured by the EURO-D depression scale, whereas in Columns (9) and (10) we analyze the relationship between inheritance receipt and the probability of being depressed. Our results indicate a positive association between receiving an inheritance since the previous wave and both measures of depression for males and females. However, statistically significant effects at conventional levels are observed only among females. Specifically, the receipt of an inheritance since the previous wave is associated with an increase of 0.08 standard deviations in the EURO-D depression score and a 3 percentage point increase in the probability of being depressed among women. Both effects are statistically significant at the 1 % level.

Until now, the survey waves have been employed as repeated cross-sections, and we have pooled together all data from six different waves of SHARE. The results show that there is a strong negative relationship between household inheritances and individual weight, whereas this relationship is positive for depression status, particularly among the female sub-sample. However, it is possible that these relationships are driven by the presence of individual time-invariant heterogeneity (e.g., taste for leisure, risk aversion). In this context, SHARE enables us to further control for individual time-invariant heterogeneity among respondents. Thus, we go beyond conditional correlations and examine whether this pattern holds for the same individuals over time, by controlling for unobserved time-invariant heterogeneity among individuals. That is, we estimate individual fixed-effects models that account for unobserved time-invariant heterogeneity between those who inherit and those who do not, and capture potential omitted variable biases. The results from the fixed-effects estimator are reported in Table 3.[16]

We find that including individual fixed effects strongly affects the results, since the estimates are very different from those reported in Table 2. Specifically, estimates in Table 3 suggest that there is no change in BMI or in the probability of being overweight or obese after an inheritance receipt, for either males or females. However, we do find that the receipt of an inheritance increases the EURO-D depression scale by 0.059 standard deviations among females, with this magnitude being statistically significant at the 1 % level. In addition, receiving an inheritance increases the probability of experiencing depressive symptoms among females by 2.3 percentage points ($p < 0.05$). Furthermore, Figs. 1 and 2 present the estimated coefficients for inheritance receipt across each individual symptom of the EURO-D scale, derived from 12 separate linear probability models based on Eq. (1) and including individual fixed effects. These results suggest that, among females, the observed estimates are primarily driven by increased symptoms of depression, fatigue, difficulty concentrating, and tearfulness.

As additional checks, we re-estimate Eq. (1) through OLS with individual fixed effects, excluding individuals who expect to inherit in the near future and report positive chances of inheriting in the next 10 years. These individuals are likely to differ in both observable and unobservable characteristics from those who do not expect to inherit in the near future. Thus, we focus on a sub-sample where the receipt of an inheritance is largely unexpected and any change in health in health prior to its actual receipt is unlikely. Table A1 in Appendix A presents these results. We find that our main results remain robust, although the estimates show larger magnitudes. Specifically, accounting for time-invariant individual unobserved heterogeneity, we observe that the receipt of an inheritance increases the EURO-D scale by 0.094 standard deviations among females, whereas it increases the probability of being depressed by 6.8 percentage points among females.

Similarly, we abstract from removing those individuals and further

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[15] We emphasize that we include household net worth lagged one period, in order to avoid double counting inheritance receipt since the previous interview.

[16] Given that no individual in our data moves between countries, the individual fixed effects also capture country-specific effects. We also include country-wave fixed effects and find similar estimates, which are available from the authors upon request.

Table 2

Relationship between household inheritance and health.

	BMI		Overweight		Obese		Mental health		Depressed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Inheritance since the previous wave	−0.000	−0.009**	0.002	−0.018*	−0.006	−0.019**	0.026	0.080***	0.008	0.030***
	(0.003)	(0.004)	(0.011)	(0.011)	(0.009)	(0.008)	(0.021)	(0.020)	(0.008)	(0.009)
Expectation > 0 (one wave lagged)	−0.008***	−0.007**	−0.019**	−0.020**	−0.017**	−0.010	−0.056***	−0.020	−0.017***	−0.007
	(0.003)	(0.003)	(0.008)	(0.008)	(0.007)	(0.007)	(0.015)	(0.014)	(0.006)	(0.006)
Age	0.011***	0.017***	0.033***	0.052***	0.018***	0.020***	−0.140***	−0.092***	−0.048***	−0.038***
	(0.002)	(0.002)	(0.005)	(0.005)	(0.004)	(0.004)	(0.011)	(0.009)	(0.004)	(0.004)
Age^2/100	−0.009***	−0.013***	−0.027***	−0.039***	−0.016***	−0.017***	0.104***	0.069***	0.035***	0.028***
	(0.001)	(0.001)	(0.004)	(0.003)	(0.003)	(0.003)	(0.008)	(0.007)	(0.003)	(0.003)
Primary education	−0.007	−0.024***	−0.026	−0.063***	−0.036	−0.064***	−0.236***	−0.398***	−0.073***	−0.135***
	(0.008)	(0.007)	(0.023)	(0.016)	(0.023)	(0.018)	(0.060)	(0.045)	(0.022)	(0.017)
Lower secondary education	−0.023***	−0.045***	−0.046*	−0.110***	−0.081***	−0.107***	−0.326***	−0.483***	−0.095***	−0.160***
	(0.008)	(0.007)	(0.024)	(0.018)	(0.024)	(0.019)	(0.060)	(0.047)	(0.022)	(0.018)
Upper secondary education	−0.021**	−0.063***	−0.046*	−0.148***	−0.083***	−0.141***	−0.397***	−0.567***	−0.121***	−0.198***
	(0.008)	(0.007)	(0.024)	(0.018)	(0.023)	(0.019)	(0.059)	(0.046)	(0.022)	(0.018)
Post-secondary education	−0.033***	−0.084***	−0.070**	−0.196***	−0.115***	−0.160***	−0.385***	−0.608***	−0.115***	−0.212***
	(0.010)	(0.009)	(0.030)	(0.024)	(0.027)	(0.023)	(0.066)	(0.053)	(0.024)	(0.022)
First stage of tertiary education	−0.051***	−0.099***	−0.130***	−0.243***	−0.140***	−0.197***	−0.430***	−0.636***	−0.125***	−0.231***
	(0.008)	(0.008)	(0.024)	(0.019)	(0.023)	(0.019)	(0.060)	(0.047)	(0.022)	(0.019)
Second stage of tertiary education	−0.062***	−0.122***	−0.112**	−0.217***	−0.171***	−0.249***	−0.392***	−0.619***	−0.117***	−0.205***
	(0.016)	(0.020)	(0.047)	(0.055)	(0.038)	(0.035)	(0.095)	(0.090)	(0.036)	(0.043)
Employed	−0.007**	−0.018***	0.001	−0.020**	−0.032***	−0.046***	−0.200***	−0.173***	−0.061***	−0.066***
	(0.003)	(0.003)	(0.009)	(0.009)	(0.008)	(0.008)	(0.018)	(0.016)	(0.007)	(0.007)
Log of household income	0.000	−0.000	0.001	0.000	−0.002	−0.001	−0.010***	−0.011***	−0.003***	−0.004***
	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.003)	(0.003)	(0.001)	(0.001)
Log of household net worth (one wave lagged)	−0.000	−0.002***	0.001	−0.004***	−0.003***	−0.005***	−0.019***	−0.020***	−0.006***	−0.008***
	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)
Married	0.008**	−0.005	0.044***	−0.010	0.012	−0.017**	−0.155***	−0.097***	−0.042***	−0.038***
	(0.003)	(0.003)	(0.010)	(0.008)	(0.009)	(0.007)	(0.020)	(0.015)	(0.007)	(0.007)
Household size	0.000	0.003**	−0.001	0.008**	−0.002	0.005	0.002	0.009	−0.002	0.006*
	(0.001)	(0.001)	(0.004)	(0.004)	(0.004)	(0.004)	(0.008)	(0.008)	(0.003)	(0.003)
Number of children	0.002*	0.009***	0.004	0.019***	0.003	0.016***	0.013**	0.005	0.004*	0.001
	(0.001)	(0.001)	(0.003)	(0.002)	(0.002)	(0.002)	(0.005)	(0.005)	(0.002)	(0.002)
Number of living brothers	−0.001	−0.001	−0.001	−0.003	−0.001	−0.002	−0.000	0.004	−0.001	0.001
	(0.001)	(0.001)	(0.003)	(0.003)	(0.003)	(0.002)	(0.005)	(0.005)	(0.002)	(0.002)
Number of living sisters	−0.001	−0.003***	−0.005*	−0.008***	0.001	−0.006***	0.005	−0.004	0.002	−0.001
	(0.001)	(0.001)	(0.003)	(0.003)	(0.003)	(0.002)	(0.006)	(0.005)	(0.002)	(0.002)
Constant	3.038***	2.821***	−0.207	−0.954***	−0.081	−0.150	5.603***	3.934***	2.083***	1.905***
	(0.062)	(0.064)	(0.196)	(0.171)	(0.160)	(0.140)	(0.411)	(0.336)	(0.155)	(0.150)
Observations	36,346	46,744	36,346	46,744	36,346	46,744	36,346	46,744	36,346	46,744
Number of individuals	16,735	21,120	16,735	21,120	16,735	21,120	16,735	21,120	16,735	21,120

Notes: OLS estimates. Robust standard errors clustered at the individual level are reported in parentheses. Data come from the Survey of Health, Ageing and Retirement in Europe (SHARE), waves 1–7. Sample is restricted to individuals aged + 50 years old with at least two consecutive waves. Estimates also include wave and country fixed effects, but not shown for brevity. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

include an interaction between inheritance receipt and an indicator for expectation equal to 0 in the past wave (rather than expectation higher than 0). Thus, we test whether there are any additional effects of inheritances that were not anticipated. Results in Table A2 suggest that unexpected inheritances increase the EURO-D score by 0.065 standard deviation among females and the probability of experiencing depressive symptoms by 6.2 percentage points, in comparison to expected inheritances, which do not display statistically significant effects. Overall, only unexpected inheritances show significant effects on health outcomes.

On the other hand, a potential concern in our analysis is that the receipt of an inheritance is often preceded by the death of a parent, an event which has an adverse impact on the mental health of surviving relatives (Böckerman et al., 2023). This raises the possibility that the observed deterioration in mental health may primarily reflect grief associated with parental loss, rather than the inheritance itself. However, our findings suggest that inheritance receipt is associated with worsened mental health outcomes even after controlling for parental death between survey waves. This indicates that the negative effects of

inheritances on mental health are not attributable to bereavement. Further details are provided in Appendix Table A3. Excluding individuals who have experienced the death of a parent, either the father or the mother, also leads to consistent findings in Appendix Table A4. All in all, the negative mental health impact of inheritances is less likely to be driven by the death of a parent.

Finally, we examine separately inheritance realization and inheritance expectations as our variables of interest, considering also individual fixed effects. Specifically, Appendix Table A5 and A6 present the estimates for these two variables, respectively. (Table A5 excludes the control for expectations of receiving an inheritance within the next 10 years, while Table A6 excludes inheritance realization). The estimated coefficients differ in both magnitude and sign, indicating that only the realization of inheritances has a statistically significant effect. These findings are consistent with the main results reported in Table 3.

Overall, the health effects of inheritances in Europe are partially consistent with previous research in the US (Carman, 2013; Kim and Ruhm, 2012). In terms of physical health, Au and Johnston (2012) show no significant obesity effects of inheritances in the US. In contrast,

Table 3
Household inheritance and health.

	BMI		Overweight		Obese		Mental health		Depressed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Inheritance since the previous wave	0.002	0.001	0.009	−0.006	−0.001	−0.003	0.009	0.059***	0.003	0.023**
	(0.001)	(0.002)	(0.008)	(0.008)	(0.006)	(0.006)	(0.020)	(0.019)	(0.008)	(0.010)
Expectation > 0 (one wave lagged)	−0.001	0.001	0.014	−0.003	0.006	0.015	−0.020	−0.009	−0.009	0.001
	(0.003)	(0.003)	(0.013)	(0.012)	(0.011)	(0.010)	(0.033)	(0.031)	(0.013)	(0.015)
Age	0.011***	0.012***	0.037***	0.038***	0.011	0.017***	−0.129***	−0.128***	−0.046***	−0.042***
	(0.002)	(0.002)	(0.008)	(0.008)	(0.007)	(0.007)	(0.022)	(0.019)	(0.009)	(0.009)
Age^2/100	−0.009***	−0.010***	−0.029***	−0.030***	−0.010***	−0.012***	0.111***	0.093***	0.037***	0.034***
	(0.001)	(0.001)	(0.005)	(0.004)	(0.004)	(0.004)	(0.013)	(0.011)	(0.005)	(0.005)
Employed	0.004**	−0.001	0.016*	−0.002	−0.008	−0.013*	−0.008	−0.016	−0.002	0.002
	(0.002)	(0.002)	(0.009)	(0.008)	(0.007)	(0.007)	(0.022)	(0.020)	(0.009)	(0.011)
Log of household income	−0.000	0.000	−0.001	0.002	−0.001	0.001	−0.002	−0.001	−0.001	−0.001
	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.004)	(0.004)	(0.001)	(0.002)
Log of household net worth (one wave lagged)	−0.000*	−0.000	−0.001	0.000	−0.000	−0.001	0.003	0.004**	0.000	0.001
	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)	(0.001)
Married	0.010**	0.009**	0.035*	0.010	0.037**	0.021*	−0.333***	−0.264***	−0.097***	−0.108***
	(0.005)	(0.004)	(0.021)	(0.013)	(0.019)	(0.013)	(0.060)	(0.038)	(0.025)	(0.019)
Household size	0.002	0.001	0.011**	0.003	0.001	0.008*	0.004	0.013	0.000	0.011
	(0.001)	(0.001)	(0.005)	(0.005)	(0.005)	(0.005)	(0.013)	(0.013)	(0.006)	(0.007)
Number of children	0.001	0.002	−0.003	0.006	0.005	0.006	0.007	−0.016	−0.002	−0.008
	(0.001)	(0.001)	(0.005)	(0.004)	(0.004)	(0.005)	(0.012)	(0.012)	(0.005)	(0.007)
Number of living brothers	−0.001	0.002	0.003	0.002	−0.001	0.005	−0.008	−0.012	−0.003	−0.001
	(0.001)	(0.002)	(0.004)	(0.006)	(0.005)	(0.005)	(0.012)	(0.012)	(0.005)	(0.005)
Number of living sisters	0.002*	0.001	0.008	0.007	0.013***	−0.003	−0.011	0.010	0.002	0.005
	(0.001)	(0.001)	(0.006)	(0.005)	(0.005)	(0.005)	(0.015)	(0.013)	(0.005)	(0.006)
Constant	2.962***	2.897***	−0.488	−0.599	−0.085	−0.401	3.824***	4.534***	1.655***	1.586***
	(0.114)	(0.105)	(0.439)	(0.389)	(0.394)	(0.343)	(1.143)	(0.983)	(0.489)	(0.502)
Observations	36,346	46,744	36,346	46,744	36,346	46,744	36,346	46,744	36,346	46,744
Number of individuals	16,735	21,120	16,735	21,120	16,735	21,120	16,735	21,120	16,735	21,120

Notes: Individual fixed effects OLS estimates. Robust standard errors clustered at the individual level are reported in parentheses. Data come from the Survey of Health, Ageing and Retirement in Europe (SHARE), waves 1–7. Sample is restricted to individuals aged + 50 years old with at least two consecutive waves. Estimates also include wave fixed effects, but not shown for brevity. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Fig. 1. Household inheritance and EURO-D components, males (linear probability models) *Notes*: N = 36,346. Individual fixed effects estimates. The figure shows the estimated effects of inheritance receipt on twelve distinct depression symptoms among males, based on linear probability models. The X-axis displays the twelve outcomes. The vertical gray lines represent pairwise 95 % confidence intervals, calculated using standard errors clustered at the individual level. Data come from the Survey of Health, Ageing and Retirement in Europe (SHARE), waves 1–7. Sample is restricted to individuals aged + 50 years old with at least two consecutive waves.

though focusing on a different health outcome, Carman (2013) finds that inheritances decrease the log odds of better self-assessed health by 22 percent for men relative to women. Regarding mental health, our findings are closely aligned with Raschke (2019), who finds that lottery winnings reduce mental health—measured using the SOEP mental component scale, where higher values indicate a better mental health—by 0.22 standard deviations.

Heterogeneity analyses

We run five alternative heterogeneity analyses. Specifically, we run a total of 16 regressions that involve different subgroups of population, and report the key findings in Figs. 3 and 4. For brevity, we report in the main text the results for the EURO-D scale on depression and the dummy variable indicating depressed individuals, but the numerical results for the all the health outcomes here considered are also available in
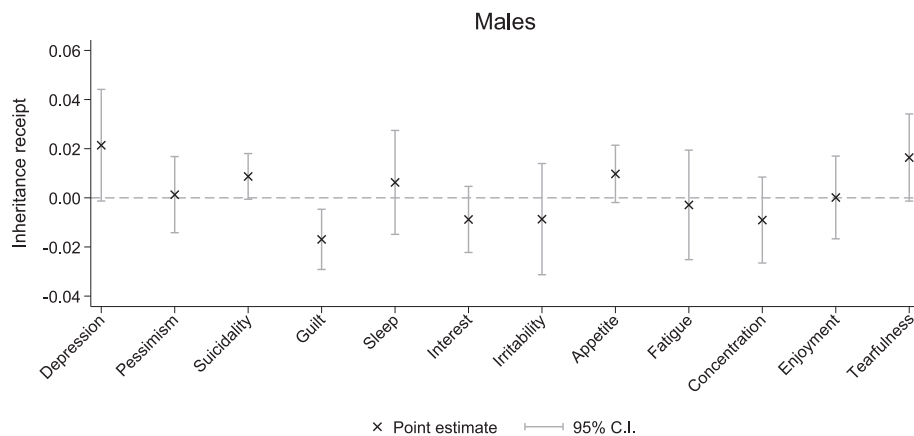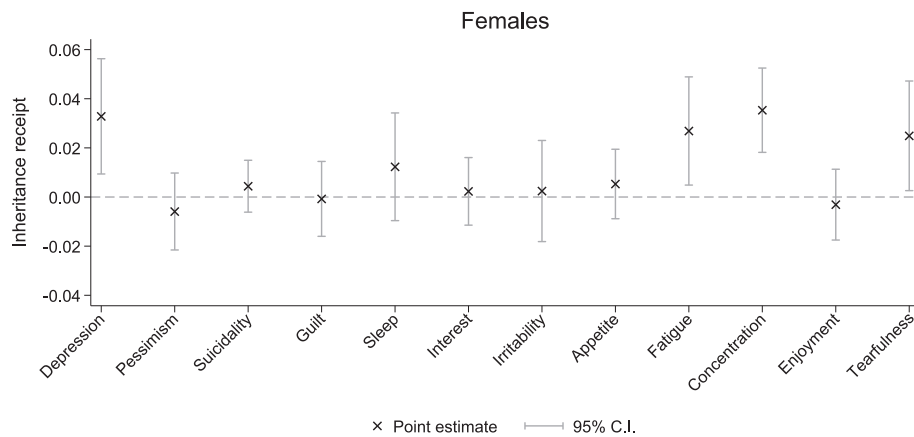
Fig. 2. Household inheritance and EURO-D components, females (linear probability models) *Notes*: N = 46,744. Individual fixed effects estimates. The figure shows the estimated effects of inheritance receipt on twelve distinct depression symptoms among females, based on linear probability models. The X-axis displays the twelve outcomes. The vertical gray lines represent pairwise 95 % confidence intervals, calculated using standard errors clustered at the individual level. Data come from the Survey of Health, Ageing and Retirement in Europe (SHARE), waves 1–7. Sample is restricted to individuals aged + 50 years old with at least two consecutive waves.
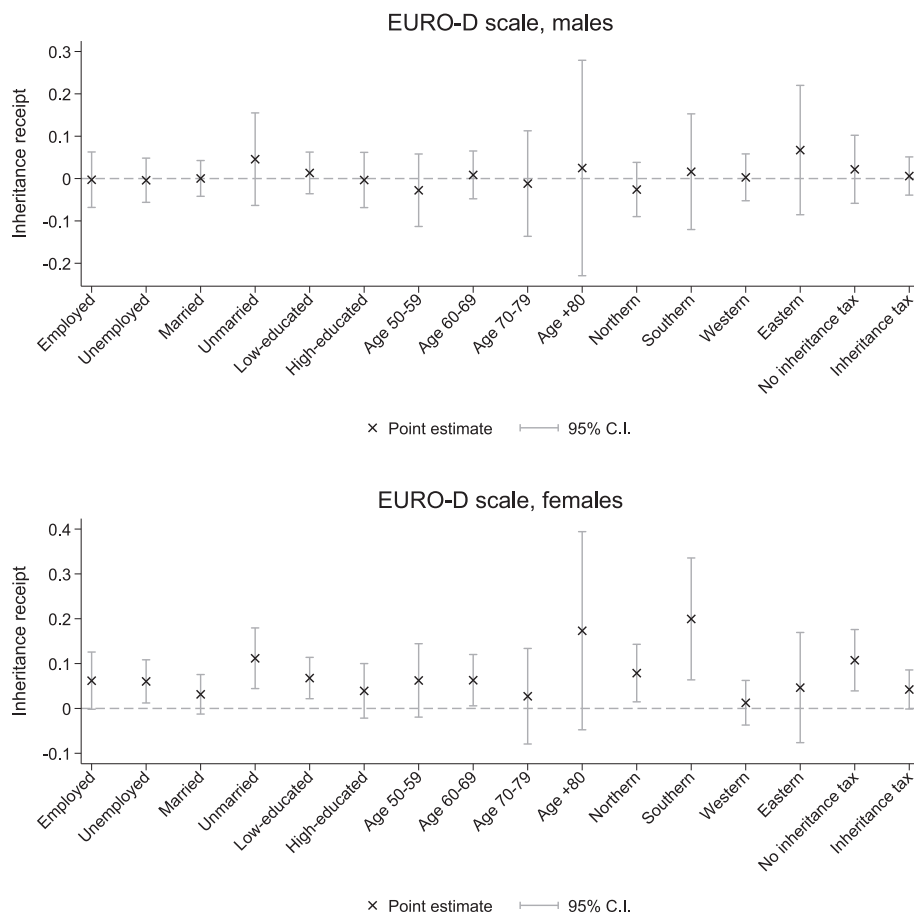
Fig. 3. Heterogeneity analysis of EURO-D scale *Notes*: Individual fixed effects estimates. The figure shows the estimated effects of inheritance receipt on the EURO-D scale on depression among different subgroups of males and females. The X-axis displays the sixteen subgroups. The vertical gray lines represent pairwise 95 % confidence intervals, calculated using standard errors clustered at the individual level. Data come from the Survey of Health, Ageing and Retirement in Europe (SHARE), waves 1–7. Sample is restricted to individuals aged + 50 years old with at least two consecutive waves.

Appendix Table A7–A12. It may be that an inheritance can release recipients' time constraints, either by quitting the labor force or by reducing elder-care time. Thus, we consider whether there is any heterogeneity according to the respondent's employment status, as it is quite reasonable to assume that being employed imposes considerable restrictions on engaging in certain healthy activities, such as exercise or home production. That is, we split our sample according to the respondent's current working status, by considering whether the respondent is in paid work or not. We observe that the previous estimates suggesting a positive impact of inheritance receipt on the EURO-D scale and the probability of being depressed among females appear to be driven by women who are currently not employed. Numerically,
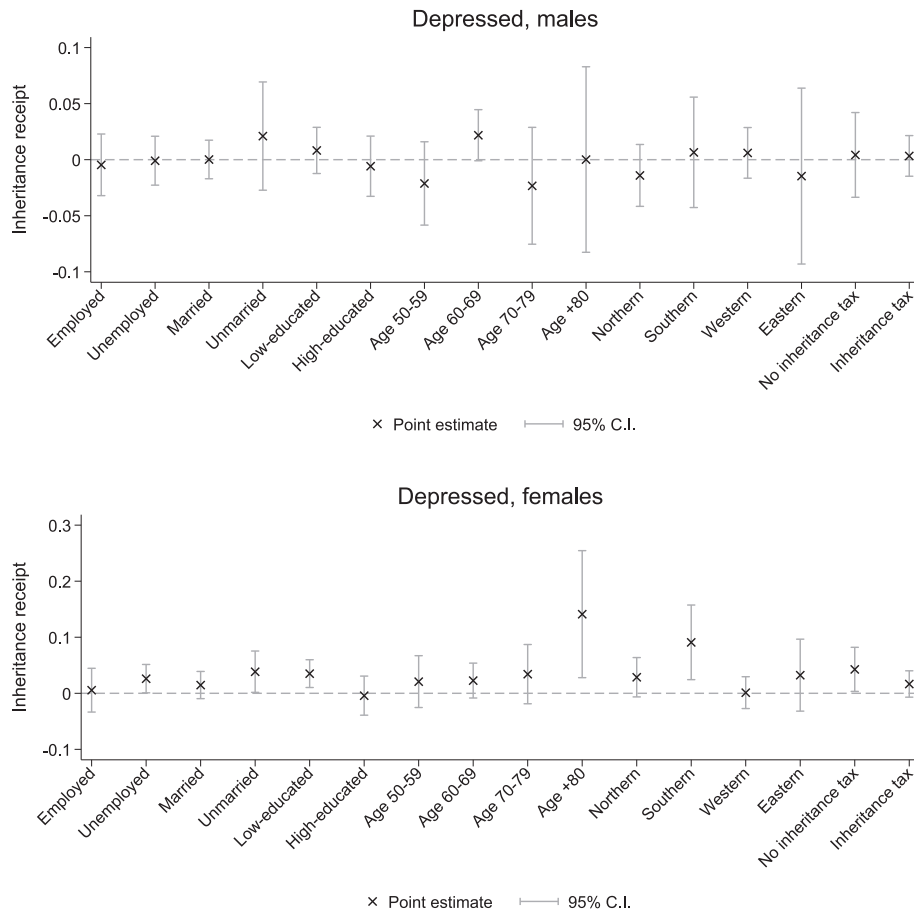
Fig. 4. Heterogeneity analysis of the probability of being depressed *Notes*: Individual fixed effects estimates. The figure shows the estimated effects of inheritance receipt on the probability of being depressed among different subgroups of males and females. The X-axis displays the sixteen subgroups. The vertical gray lines represent pairwise 95 % confidence intervals, calculated using standard errors clustered at the individual level. Data come from the Survey of Health, Ageing and Retirement in Europe (SHARE), waves 1–7. Sample is restricted to individuals aged + 50 years old with at least two consecutive waves.

estimates suggest that the receipt of an inheritance is related to an increase of 0.060 standard deviations in the EURO-D scale among non-employed females, whereas it increases the probability of being depressed by 2.6 percentage points for females who are not currently employed.

We also split the sample and estimate models separately for two groups based on marital status: married and unmarried respondents. The results suggest a certain degree of heterogeneity among females, as it appears that only unmarried women increase their EURO-D scale and their probability of being depressed after inheriting. Specifically, the receipt of an inheritance among unmarried females increases the EURO-D scale and the probability of being depressed by 0.112 standard deviations and 3.9 percentage points, respectively.

Mimicking Raschke (2019) and Shi (2022), we run a heterogeneity analysis considering educational attainment. Specifically, we split our sample between low- and high-educated individuals. Low-educated individuals are defined as those with less than tertiary education, whereas high-educated individuals are those with some tertiary education (ISCED-97 5 or ISCED-97 6). The results suggest that our overall estimates for females are driven by low-educated women. In this sub-sample, the receipt of an inheritance increases the EURO-D depression score by 0.068 standard deviations, whereas it increases the probability of being depressed by 3.5 percentage points.

We also split the sample by 10-year age intervals, with the last interval referring to individuals aged 80 or older. From this additional check, we find that our overall estimates from Table 3 are driven by females aged 60–69 and 80 years or older. Specifically, the receipt of an inheritance among females aged between 60 and 69 increases the EURO-

D depression scale by 0.063 standard deviations, whereas it increases the probability of being depressed by 14.1 percentage points among females aged 80 or more.

Finally, we exploit the cross-national nature of our dataset and investigate whether our results are influenced by specific regional country groups. To do so, we divide our sample into a comprehensive regional grouping classification. Specifically, we sort the countries in our sample into Northern European countries (Sweden and Denmark), Southern European countries (Spain, Italy, and Greece), Western European countries (Austria, Belgium, France, Germany, Switzerland, and the Netherlands), and Eastern European countries (Czech Republic, Estonia, Poland, and Slovenia). This classification is based on a large strand of the literature, from different perspectives, using SHARE (see, for example, Belloc et al., 2025a; Cavapozzi et al., 2020; Fawaz and Mira, 2023; Ferrari, 2020; Jolly and Theodoropoulos, 2023; Trevisan and Zantomio, 2016), and Israel is excluded from this analysis (Fawaz and Mira, 2023). The estimates suggest that our primary findings are largely driven by females located in Northern and Southern European countries. Specifically, among females in Northern Europe, receiving an inheritance increases the EURO-D score by 0.079 standard deviations. In contrast, among females in Southern Europe, the receipt of an inheritance corresponds to an increase of 0.200 standard deviations in the EURO-D score and a 9.1 percentage point rise in the probability of being classified as depressed.

We also conduct a country heterogeneity analysis based on the prevalence of inheritance taxes in our sample. Specifically, we divide the sample into two groups of countries: those that impose taxes on inheritances and those where inheritance taxes have been abolished. The

countries without inheritance taxes include Austria (since 2008), Czech Republic (since 2013), Estonia (since 2000), Israel (since 1981), and Sweden (since 2004). The results suggest that our overall estimates for females displayed in Table 3 appear to be driven by countries that do not tax inheritances.[17]

Underlying mechanisms

In this section, we further investigate potential mechanisms behind our main results. We identify a heterogenous response to inheritance by gender, since inheritance receipt shows a positive correlation among women, in terms of depression, whereas no significant correlation appears for men's mental health. In this section, we analyze the underlying specific channels behind this correlation and through which inheritances may impact mental health. To do this, given the richness of the SHARE data, we pay attention to different measures of food consumption, physical activity and risky addictive behaviors.[18]

For food consumption, we use the Consumption (CO) Module of the survey, which asks the following three questions at the household level: "Do you and other members of your household consume vegetables, fruit or meat that you have grown, produced, caught or gathered yourselves?",[19] "Thinking about the last 12 months: about how much did your household spend in a typical month on food to be consumed at home?", and "Still thinking about the last 12 months: about how much did your household spend in a typical month on food to be consumed outside the home?".[20] These three questions are answered by the household respondent on behalf of the whole household. The potential responses to the first question are "Yes" or "No", whereas the potential responses to the last two questions refer to the amount spent on food in a typical month. Given the sample selection covered, we see two competing results. On the one hand, the receipt of an inheritance worth more than 5000 euros is a significant improvement in household resources, which may lead to a positive, statistically significant relationship with the amount spent on food (i.e., expensive nutritious goods), due to a pure income effect. On the other hand, since the receipt of an inheritance is more common among the older population covered by our dataset, this group may have developed rigid patterns throughout their life cycle with respect to consumption and food expenditure inside and outside the home (Celidoni and Rebba, 2017), and no correlation should appear in this case.

As for physical activity frequency, given that physical activity has many health benefits—such as weight or depression management, especially at advanced ages—we use two questions from the Behavioural Risks (BR) Module to define physical activity: "How often do you engage in vigorous physical activity, such as sports, heavy housework, or a job that involves physical labour?" and "How often do you engage in activities that require a low or moderate level of energy such as gardening, cleaning the car, or doing a walk?", which are answered by all the respondents of the survey.[21] Inheritance receipt may affect daily routines by encouraging individuals to quit the labor force, reducing time use constraints due to elder care, or promoting certain activities as a result of

financial improvement. Eliminating these time-specific demands could result in increased time available for other activities. For instance, exercise or home production—typical of healthy and active lifestyles—has multiple benefits in older age: maintaining muscle strength and cognitive function, reducing anxiety, depression, or the prevalence of obesity, and improving social outcomes through community involvement. However, older people may be less prone to change their lifestyle, since they have had more time to develop specific time use patterns. The possible responses to these two questions are: "More than once a week", "Once a week", "One to three times a month", or "Hardly ever, or never".[22] We dichotomize these two questions into two dummy variables that take the value 1 if the respondent reports "More than once a week", and 0 if they report "Once a week" or less (Godard, 2016; Lenzen et al., 2020; Motegi et al., 2020; Müller and Shaikh, 2018).[23]

From the BR Module, we also use survey questions to study the consumption of risky addictive goods and healthy eating. Specifically, we use the following two questions to define risky behaviors: "Do you smoke at the present time?" and "During the last 3 months, how often have you drunk any alcoholic beverages, like beer, cider, wine, spirits or cocktails?". The potential responses to the current smoking question are "Yes" or "No", and we define a dummy variable that takes the value 1 for current smokers, 0 otherwise. The possible responses to the frequency of drinking alcoholic beverages are: "Almost every day", "Five or six days a week", "Three or four days a week", "Once or twice a week", "Once or twice a month", "Less than once a month", and "Not at all in the last 3 months". From this latter question, we define a dummy variable that takes the value 1 for those who drank alcoholic beverages at least three days a week, 0 otherwise (Celidoni et al., 2020). Finally, healthy diet is defined through the survey question: "In a regular week, how often do you consume a serving of fruits or vegetables?", available in waves 4–7. We dichotomize this question into a dummy variable that takes the value 1 for "Every day", 0 otherwise (Celidoni et al., 2020).[24]

Tables 4 and 5 show the results from sixteen models that use all these as dependent variables, while the rest of the specification remains as in Eq. (1), with the inclusion of individual fixed effects. For the consumption of home-produced food, we document that the receipt of an inheritance increases the probability of consuming home-produced food by 4.7 percentage points among females, a coefficient that is statistically significant at the 5 % level. Additionally, we find that the receipt of an inheritance increases the probability of participating in activities that involve vigorous levels of energy by 2.6 percentage points and the probability of participating in activities that involve moderate levels of energy by 2 percentage points among women; both estimates are statistically significant at the 5 % level. All in all, despite heirs engaging in physical activity, which has been shown to prevent depressive symptoms (Felez-Nobrega et al., 2023), they are ultimately more likely to be depressed and report higher levels of depression symptoms. Finally, we find that inheritance receipt significantly increases the prevalence of smoking among men, aligning with the findings of van Kippersluis and Galama (2014) in the US.

Comparison with existing research

In this paper, we study the impact of inheritances on physical and mental health using data from 16 countries over 2004–2017 from

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[17] We also examine whether there is any heterogeneity in our estimates according to the presence of living brothers and sisters, and find that our results for females appear to be driven by women who have living brothers or sisters.

[18] We also explore the frequency of voluntary or charity work, but the results, available upon request, are not statistically significant.

[19] SHARE also provides the value of home-produced food, but this variable contains many missing values.

[20] We focus on a sample of unmarried respondents to pursue analysis at the gender level and cluster the standard errors at the individual level, as in Eq. (1).

[21] Prior research has also studied the effect of a wealth shock, either through a lottery win in the BHPS, SOEP, or SLP, and an inheritance in the HRS, on unhealthy behaviors such as alcohol consumption and smoking (Apouey and Clark, 2015; Au and Johnston, 2015; Kim and Koh, 2021; Kim and Ruhm, 2012; Raschke, 2019; van Kippersluis and Galama, 2014).

[22] We acknowledge a limitation regarding recall bias in these measures based on stylized questionnaires (Gimenez-Nadal and Molina, 2022). At this point, information from time diaries could help reduce such measurement error.

[23] We exclude respondents who reported being vigorously physically active but not moderately active at least once a week (Lenzen et al., 2020) and find analogous results.

[24] Consistent (nonsignificant) results are found if we define a dummy variable that takes the value 1 if the respondent reports drinking alcohol almost every day (Celidoni and Rebba, 2017).

Table 4
Mechanism analyses: consumption and dietary behaviors (individual fixed effects estimates).

	log(Consumption inside home)		log(Consumption outside home)		Consume home produced food		Healthy diet	
	Male	Female	Male	Female	Male	Female	Male	Female
Inheritance since the previous wave	0.069	−0.038	−0.008	0.133	0.030	0.047**	−0.197	0.137
	(0.052)	(0.026)	(0.064)	(0.082)	(0.026)	(0.020)	(0.161)	(0.151)
Observations	5953	14,662	5584	3179	6368	15,743	11,946	15,286
Number of individuals	2929	7225	3016	1678	3078	7628	11,873	15,230

Notes: Robust standard errors clustered at the individual level. Data come from the Survey of Health, Ageing and Retirement in Europe (SHARE). Estimates also include wave fixed effects and socio-demographics, but not shown for brevity. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 5
Mechanism analyses: physical activity and risk behaviors (individual fixed effects).

	Vigorous physical activity		Moderate physical activity		Current smoker		Alcoholic beverages	
	Male	Female	Male	Female	Male	Female	Male	Female
Inheritance since the previous wave	0.008	0.026**	−0.008	0.020**	0.025**	−0.008	0.000	0.017
	(0.012)	(0.012)	(0.011)	(0.010)	(0.011)	(0.009)	(0.014)	(0.013)
Observations	37,586	47,951	37,587	47,965	19,500	20,892	23,387	29,303
Number of individuals	17,108	21,416	17,110	21,419	13,235	13,483	16,460	20,612

Notes: Robust standard errors clustered at the individual level. Data come from the Survey of Health, Ageing and Retirement in Europe (SHARE). Estimates also include wave fixed effects and socio-demographics, but not shown for brevity. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

SHARE. We find that inheritances increase the EURO-D depression scale and the probability of being depressed among women. In terms of magnitude, receiving an inheritance increases the EURO-D scale by 0.059 standard deviations and the probability of experiencing depressive symptoms by 2.3 percentage points among women, net of individual time-invariant unobserved heterogeneity and signs of anticipation for inheritance receipt. These estimates are driven by unexpected inheritances and are particularly concentrated among vulnerable women who are unemployed, unmarried, less educated, and are in Southern European countries. Furthermore, we find that the receipt of an inheritance significantly increases the probability of doing activities that involve vigorous and moderate levels of exercise among women.

These gender-specific results contribute novel insights to the existing (and mixed) literature on the effects of wealth/income shocks on health measures. To the best of our knowledge, this is the first study to provide conclusions that are applicable across multiple European countries, as previous research has predominantly focused on single-country datasets (Au and Johnston, 2015; Carman, 2013; Cesarini et al., 2016; Costa-Font and Györi, 2023; Kim and Ruhm, 2012; Raschke, 2019). Regarding BMI, we find that inheritances have no significant effects on BMI for either males or females. This result is consistent with prior research in the US, which focused on older adults (Kim and Ruhm, 2012), but contrasts with findings from studies conducted in Australia (Au and Johnston, 2015) and the UK (Costa-Font and Györi, 2023). A potential explanation for these discrepancies could lie in the differences in populations and income shocks examined. Specifically, the studies by Au and Johnston (2015) and Costa-Font and Györi (2023) involve younger cohorts and focus on a different source of variation in income, namely, lottery wins.

In contrast, our analysis of mental problems reveals that receiving an inheritance increases the prevalence of depression symptoms and the probability of depression among females, controlling for anticipatory effects and individual unobserved heterogeneity. These results suggest that additional wealth exacerbates, rather than mitigates, mental health problems among older Europeans. Our findings are consistent with recent evidence in Germany (Raschke, 2019) and the US (Carman, 2013), which have reported adverse effects of income and wealth shocks on mental and general health. Furthermore, we find that these effects are primarily driven by female heirs with lower levels of education, who may struggle to manage the economic resources provided by inheritance

appropriately. This pattern is consistent with Raschke's (2019) study, which highlights educational differences in the mental health impacts of lottery wins. Specifically, Raschke (2019) finds that only lottery winners with lower levels of education experience a decline in mental health immediately following the windfall, whereas those with higher educational attainment do not exhibit significant changes in mental health.

In terms of underlying channels, we show that inheritances lead women to increase the frequency of participation in activities that involve vigorous and moderate levels of exercise. This starkly contrasts with Kim and Ruhm (2012), van Kippersluis and Galama (2014), and Au and Johnston (2015), who do not report any statistically significant estimates for the probability of engaging in physical activity, either moderate or vigorous. Finally, inheritances increase the prevalence of smoking among males, which fits previous findings by van Kippersluis and Galama (2014) on inheritances in the US, which suggests that inheritances can induce engagement in risky health behaviors.

Conclusions

This paper examines the health effects, both physical and mental, of receiving an inheritance among older adults in Europe. Using data from the Survey of Health, Ageing and Retirement in Europe (SHARE), we present evidence from a harmonized sample spanning 15 European countries and Israel over the period 2004–2017. In contrast to previous studies that focus on single-country analyses, our work adopts a broader, cross-national perspective.

Our results suggest a negative association between inheritance receipt and female BMI, and a positive association with depressive symptoms. Specifically, receiving an inheritance is associated with a 0.9 percent reduction in BMI and a 1.9 percentage point decrease in the probability of being obese, but only among women. In terms of mental health, the receipt of an inheritance is associated with an increase of 0.08 standard deviations in the EURO-D depression scale and a 3-percentage point rise in the probability of experiencing depressive symptoms among women. When we control for individual unobserved heterogeneity, receiving an inheritance increases the EURO-D score by 0.059 standard deviation and the probability of depressive symptoms by 2.3 percentage points among women. In addition, these estimates appear to be driven by unexpected inheritances and vulnerable women,

as they are concentrated among women who are less educated, unemployed, unmarried, and living in Southern European countries. As for potential mechanisms, receiving an inheritance increases participation in activities that involve vigorous and moderate physical effort by 2.6 and 2 percentage points among women, whereas it increases the probability of smoking by 2.5 percentage points among men. All in all, family resources play an important role in inheritors' health behavior and outcomes, even late in the life cycle.

This empirical analysis has certain limitations. First, we assume that inheritances are exogenous as we control for expectations and permanent individual heterogeneity, but inheritances are likely correlated with income (e.g., a person from a poor background is less likely to receive an inheritance, expected or not, and we lack data on parents' net worth). As a consequence, our estimates may suffer from endogeneity issues. Studying only unexpected inheritances could solve this issue to some extent, and we find qualitatively robust results when we exclude cases where inheritances were anticipated. Relatedly, the survey does not include information on parental wealth, which prevents us from analyzing the impact of inheritances in a two-generation family setting considering the wealth of parents. Second, information regarding the amount of the inheritances is only available in the initial two waves of the survey. Finally, the information regarding weight and height is self-reported, as is common with many health surveys. Although the data contain useful information, we acknowledge that BMI—particularly self-reported weight—may be measured with error due to social stigmatization (Bellido et al., 2023; Burke and Carman, 2017; Cawley et al., 2017).

Future research should focus on other health outcomes. For instance, future research could explore the inclusion of biomarkers, which were introduced in wave 6 of the survey as additional objective health measures (Börsch-Supan et al., 2024). However, since these data are only available for a single wave conducted in 2015, incorporating individual fixed effects is not feasible. As more waves with biomarker data become available in SHARE, future studies could utilize this information to deepen the analysis of health-related outcomes. Our knowledge of negative wealth shocks is quite limited, and existing research has primarily focused on positive wealth shocks. Examining these alternative measures is a promising avenue for future research to assess whether the effects of positive and negative wealth shocks on health are asymmetric.

CRediT authorship contribution statement

Ignacio Belloc: Writing – original draft, Investigation, Formal analysis, Data curation, Conceptualization. **José Alberto Molina:** Writing – review & editing, Validation, Supervision, Resources, Project administration, Investigation, Funding acquisition, Conceptualization. **Jorge Velilla:** Writing – review & editing, Validation, Methodology, Investigation, Conceptualization.

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 work reported in this paper.

Appendix: Additional results

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Table A1
Additional results: excluding individuals who expect to inherit in the near future.

	BMI		Overweight		Obese		Mental health		Depressed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Inheritance since the previous wave	0.003	−0.004	−0.002	−0.023*	−0.001	−0.015	−0.028	0.094***	−0.007	0.068***
	(0.003)	(0.003)	(0.015)	(0.013)	(0.012)	(0.010)	(0.036)	(0.030)	(0.016)	(0.017)
Age	0.012***	0.012***	0.044***	0.033***	0.010	0.014	−0.121***	−0.127***	−0.045***	−0.042***
	(0.003)	(0.003)	(0.011)	(0.009)	(0.009)	(0.009)	(0.028)	(0.024)	(0.012)	(0.012)
Age^2/100	−0.009***	−0.010***	−0.032***	−0.027***	−0.009*	−0.009*	0.103***	0.089***	0.036***	0.035***
	(0.001)	(0.001)	(0.006)	(0.005)	(0.005)	(0.005)	(0.016)	(0.013)	(0.007)	(0.007)
Employed	0.004*	−0.000	0.018	−0.000	−0.015	−0.010	−0.027	−0.035	−0.006	−0.022
	(0.003)	(0.003)	(0.012)	(0.012)	(0.010)	(0.010)	(0.030)	(0.027)	(0.013)	(0.015)
Log of household income	−0.000	0.000	−0.001	0.002	−0.001	0.001	−0.003	−0.004	−0.001	−0.003
	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.005)	(0.004)	(0.002)	(0.002)
Log of household net worth (one wave lagged)	−0.000	−0.000	−0.000	0.001	0.001	−0.001	0.003	0.005**	−0.000	0.002*
	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.003)	(0.002)	(0.001)	(0.001)
Married	0.014**	0.008*	0.051**	0.004	0.051**	0.028*	−0.436***	−0.258***	−0.146***	−0.100***
	(0.006)	(0.005)	(0.023)	(0.016)	(0.024)	(0.016)	(0.073)	(0.043)	(0.032)	(0.022)
Household size	0.002	0.000	0.009	0.003	0.000	0.004	0.018	0.013	0.010	0.012
	(0.002)	(0.002)	(0.007)	(0.006)	(0.006)	(0.007)	(0.017)	(0.017)	(0.007)	(0.009)
Number of children	0.000	0.003	−0.002	0.007	0.002	0.007	0.010	−0.001	−0.002	−0.004
	(0.001)	(0.002)	(0.006)	(0.005)	(0.004)	(0.006)	(0.015)	(0.015)	(0.007)	(0.008)
Number of living brothers	−0.001	0.003	−0.002	0.005	−0.003	0.008	−0.011	−0.015	−0.001	−0.003
	(0.001)	(0.002)	(0.005)	(0.007)	(0.006)	(0.006)	(0.016)	(0.014)	(0.006)	(0.007)
Number of living sisters	0.003	0.000	0.010	0.007	0.019***	−0.006	−0.007	0.008	0.002	0.006
	(0.002)	(0.002)	(0.006)	(0.005)	(0.006)	(0.006)	(0.018)	(0.014)	(0.006)	(0.007)
Constant	2.879***	2.939***	−0.884	−0.373	−0.089	−0.338	3.673**	4.642***	1.646**	1.544**
	(0.152)	(0.139)	(0.573)	(0.478)	(0.510)	(0.458)	(1.493)	(1.246)	(0.668)	(0.638)
Observations	24,921	33,142	24,921	33,142	24,921	33,142	24,921	33,142	24,921	33,142
Number of individuals	11,860	15,421	11,860	15,421	11,860	15,421	11,860	15,421	11,860	15,421

Notes: Individual fixed effects OLS estimates. Robust standard errors clustered at the individual level are reported in parentheses. Data come from the Survey of Health, Ageing and Retirement in Europe (SHARE), waves 1–7. Sample is restricted to individuals aged + 50 years old with at least two consecutive waves, who do not expect to inherit in the next ten years. Estimates also include wave fixed effects, but not shown for brevity. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A2

Additional results: interaction between inheritance receipt and past inheritance expectation.

	BMI		Overweight		Obese		Mental health		Depressed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Inheritance since the previous wave	0.001	0.003	0.014	0.001	−0.001	0.001	0.024	0.035	0.009	−0.000
	(0.002)	(0.002)	(0.009)	(0.010)	(0.007)	(0.007)	(0.024)	(0.024)	(0.010)	(0.013)
Expectation equal to 0 (one wave lagged)	0.000	−0.001	−0.013	0.004	−0.006	−0.014	0.024	0.003	0.010	−0.006
	(0.003)	(0.003)	(0.013)	(0.012)	(0.011)	(0.010)	(0.034)	(0.031)	(0.013)	(0.015)
Inheritance × Past expectation equal to 0	0.002	−0.007*	−0.013	−0.020	−0.000	−0.011	−0.044	0.065*	−0.016	0.062***
	(0.003)	(0.004)	(0.017)	(0.016)	(0.014)	(0.012)	(0.044)	(0.038)	(0.018)	(0.021)
Age	0.011***	0.012***	0.037***	0.038***	0.011	0.017***	−0.129***	−0.129***	−0.046***	−0.042***
	(0.002)	(0.002)	(0.008)	(0.008)	(0.007)	(0.007)	(0.022)	(0.019)	(0.009)	(0.009)
Age²/100	−0.009***	−0.010***	−0.029***	−0.030***	−0.010***	−0.012***	0.111***	0.093***	0.037***	0.034***
	(0.001)	(0.001)	(0.005)	(0.004)	(0.004)	(0.004)	(0.013)	(0.011)	(0.005)	(0.005)
Employed	0.004**	−0.001	0.016*	−0.002	−0.008	−0.013*	−0.007	−0.016	−0.002	0.002
	(0.002)	(0.002)	(0.009)	(0.008)	(0.007)	(0.007)	(0.022)	(0.020)	(0.009)	(0.011)
Log of household income	−0.000	0.000	−0.001	0.002	−0.001	0.001	−0.002	−0.001	−0.001	−0.001
	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.004)	(0.004)	(0.001)	(0.002)
Log of household net worth (one wave lagged)	−0.000*	−0.000	−0.001	0.000	−0.000	−0.001	0.003	0.004**	0.000	0.001
	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)	(0.001)
Married	0.010**	0.008**	0.035*	0.009	0.037**	0.021*	−0.334***	−0.262***	−0.098***	−0.106***
	(0.005)	(0.004)	(0.021)	(0.013)	(0.019)	(0.013)	(0.060)	(0.038)	(0.025)	(0.019)
Household size	0.002	0.001	0.011**	0.003	0.001	0.008*	0.004	0.012	0.000	0.010
	(0.001)	(0.001)	(0.005)	(0.005)	(0.005)	(0.005)	(0.013)	(0.013)	(0.006)	(0.007)
Number of children	0.001	0.002	−0.003	0.006	0.005	0.006	0.007	−0.016	−0.002	−0.008
	(0.001)	(0.001)	(0.005)	(0.004)	(0.004)	(0.005)	(0.012)	(0.012)	(0.005)	(0.007)
Number of living brothers	−0.001	0.002	0.003	0.002	−0.001	0.005	−0.008	−0.012	−0.003	−0.001
	(0.001)	(0.002)	(0.004)	(0.006)	(0.005)	(0.005)	(0.012)	(0.012)	(0.005)	(0.005)
Number of living sisters	0.002*	0.001	0.008	0.007	0.013***	−0.003	−0.011	0.010	0.002	0.005
	(0.001)	(0.001)	(0.006)	(0.005)	(0.005)	(0.005)	(0.015)	(0.013)	(0.005)	(0.006)
Constant	2.962***	2.895***	−0.476	−0.611	−0.079	−0.390	3.796***	4.555***	1.643***	1.615***
	(0.114)	(0.105)	(0.439)	(0.389)	(0.394)	(0.344)	(1.143)	(0.983)	(0.489)	(0.502)
Observations	36,346	46,744	36,346	46,744	36,346	46,744	36,346	46,744	36,346	46,744
Number of individuals	16,735	21,120	16,735	21,120	16,735	21,120	16,735	21,120	16,735	21,120

Notes: Individual fixed effects OLS estimates. Robust standard errors clustered at the individual level are reported in parentheses. Data come from the Survey of Health, Ageing and Retirement in Europe (SHARE), waves 1–7. Sample is restricted to individuals aged + 50 years old with at least two consecutive waves. Estimates also include wave fixed effects, but not shown for brevity. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A3

Additional results: controlling for parental death between survey waves.

	BMI		Overweight		Obese		Mental health		Depressed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Inheritance since the previous wave	0.001	0.001	0.012	−0.006	−0.003	−0.002	−0.011	0.065**	−0.000	0.024*
	(0.002)	(0.002)	(0.010)	(0.010)	(0.008)	(0.008)	(0.027)	(0.025)	(0.011)	(0.013)
Expectation > 0 (one wave lagged)	−0.002	0.005	0.008	0.005	0.004	0.017	−0.017	−0.033	−0.002	−0.007
	(0.003)	(0.003)	(0.013)	(0.013)	(0.012)	(0.011)	(0.037)	(0.033)	(0.014)	(0.016)
Age	0.010***	0.017***	0.029**	0.041***	0.008	0.022**	−0.124***	−0.128***	−0.052***	−0.037***
	(0.003)	(0.003)	(0.012)	(0.011)	(0.010)	(0.009)	(0.031)	(0.027)	(0.012)	(0.013)
Age²/100	−0.009***	−0.011***	−0.025***	−0.035***	−0.009*	−0.013***	0.109***	0.093***	0.037***	0.034***
	(0.001)	(0.002)	(0.006)	(0.006)	(0.005)	(0.005)	(0.016)	(0.013)	(0.007)	(0.007)
Employed	0.003	0.001	0.012	−0.001	−0.016*	−0.008	0.049*	0.019	0.015	0.016
	(0.002)	(0.003)	(0.012)	(0.011)	(0.009)	(0.009)	(0.029)	(0.027)	(0.011)	(0.014)
Log of household income	−0.000	0.000	−0.002	0.002	−0.002	0.001	−0.002	0.003	−0.001	0.001
	(0.000)	(0.000)	(0.002)	(0.002)	(0.002)	(0.001)	(0.006)	(0.005)	(0.002)	(0.002)
Log of household net worth (one wave lagged)	0.000	−0.000	0.000	0.000	−0.000	0.000	−0.001	0.005**	−0.001	0.002
	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.003)	(0.002)	(0.001)	(0.001)
Married	0.015**	0.012**	0.040	0.022	0.029	0.025	−0.364***	−0.217***	−0.105***	−0.094***
	(0.006)	(0.005)	(0.026)	(0.018)	(0.024)	(0.018)	(0.082)	(0.052)	(0.033)	(0.026)
Household size	−0.000	−0.001	−0.002	−0.005	−0.002	−0.004	0.011	−0.006	−0.004	0.000
	(0.002)	(0.002)	(0.008)	(0.007)	(0.006)	(0.007)	(0.018)	(0.019)	(0.007)	(0.009)
Number of children	0.001	−0.001	0.000	−0.001	0.007	0.001	−0.008	−0.024	−0.006	−0.011
	(0.001)	(0.002)	(0.007)	(0.005)	(0.004)	(0.006)	(0.018)	(0.016)	(0.008)	(0.009)
Number of living brothers	−0.001	0.003	0.002	0.003	−0.002	0.004	0.004	0.014	−0.002	0.010
	(0.001)	(0.002)	(0.006)	(0.007)	(0.006)	(0.006)	(0.016)	(0.016)	(0.006)	(0.007)
Number of living sisters	0.001	−0.000	0.003	0.002	0.011*	−0.006	0.009	0.015	0.014**	0.009

Table A3 (*continued*)

	BMI		Overweight		Obese		Mental health		Depressed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	(0.002)	(0.002)	(0.007)	(0.007)	(0.006)	(0.007)	(0.019)	(0.019)	(0.007)	(0.009)
Father death since the previous interview	−0.001	0.004	−0.002	0.000	−0.011	0.025	−0.001	0.017	0.006	0.002
	(0.004)	(0.004)	(0.021)	(0.015)	(0.015)	(0.015)	(0.057)	(0.044)	(0.022)	(0.022)
Mother death since the previous interview	−0.000	−0.000	−0.006	−0.002	0.006	0.007	0.034	0.054*	0.007	0.022
	(0.003)	(0.003)	(0.014)	(0.011)	(0.010)	(0.008)	(0.035)	(0.030)	(0.014)	(0.015)
Constant	3.087***	2.657***	−0.122	−0.562	0.077	−0.693	3.559**	4.479***	2.110***	1.240
	(0.152)	(0.160)	(0.660)	(0.605)	(0.559)	(0.517)	(1.733)	(1.551)	(0.704)	(0.794)
Observations	23,857	30,674	23,857	30,674	23,857	30,674	23,857	30,674	23,857	30,674
Number of individuals	12,932	16,654	12,932	16,654	12,932	16,654	12,932	16,654	12,932	16,654

Notes: Individual fixed effects OLS estimates. Robust standard errors clustered at the individual level are reported in parentheses. Data come from the Survey of Health, Ageing and Retirement in Europe (SHARE), waves 1–7. Sample is restricted to individuals aged + 50 years old with at least two consecutive waves. Estimates also include wave fixed effects, but not shown for brevity. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A4

Additional results: excluding individuals who lost one parent.

	BMI		Overweight		Obese		Mental health		Depressed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Inheritance since the previous wave	0.001	0.002	0.001	0.005	−0.003	0.004	−0.006	0.081**	−0.004	0.035**
	(0.002)	(0.003)	(0.013)	(0.013)	(0.010)	(0.009)	(0.033)	(0.032)	(0.013)	(0.017)
Expectation > 0 (one wave lagged)	−0.002	0.004	0.003	0.007	0.012	0.016	−0.020	−0.067*	−0.009	−0.020
	(0.003)	(0.004)	(0.015)	(0.014)	(0.013)	(0.012)	(0.041)	(0.035)	(0.015)	(0.017)
Age	0.010***	0.017***	0.027**	0.040***	0.008	0.025***	−0.108***	−0.129***	−0.045***	−0.040***
	(0.003)	(0.003)	(0.013)	(0.011)	(0.011)	(0.010)	(0.033)	(0.029)	(0.014)	(0.015)
Age^2/100	−0.010***	−0.011***	−0.026***	−0.034***	−0.007	−0.014***	0.103***	0.091***	0.036***	0.035***
	(0.001)	(0.002)	(0.006)	(0.006)	(0.005)	(0.005)	(0.017)	(0.014)	(0.007)	(0.007)
Employed	0.002	−0.001	0.013	−0.006	−0.014	−0.008	0.041	0.008	0.009	0.011
	(0.003)	(0.003)	(0.013)	(0.012)	(0.010)	(0.010)	(0.031)	(0.029)	(0.012)	(0.015)
Log of household income	−0.001**	0.000	−0.005**	0.002	−0.003*	0.001	−0.003	0.002	−0.003	0.002
	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.006)	(0.005)	(0.002)	(0.002)
Log of household net worth (one wave lagged)	−0.000	0.000	−0.000	0.001	−0.000	0.000	−0.002	0.005**	−0.002	0.002*
	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.003)	(0.002)	(0.001)	(0.001)
Married	0.017**	0.011**	0.040	0.019	0.052**	0.024	−0.380***	−0.230***	−0.111***	−0.104***
	(0.007)	(0.006)	(0.028)	(0.019)	(0.025)	(0.018)	(0.086)	(0.052)	(0.035)	(0.026)
Household size	−0.001	−0.002	−0.006	−0.009	−0.006	−0.005	0.006	−0.004	−0.004	0.004
	(0.002)	(0.002)	(0.008)	(0.007)	(0.007)	(0.007)	(0.019)	(0.021)	(0.008)	(0.010)
Number of children	0.001	−0.001	−0.001	−0.001	0.009**	0.001	−0.011	−0.021	−0.007	−0.012
	(0.002)	(0.002)	(0.007)	(0.006)	(0.005)	(0.007)	(0.019)	(0.017)	(0.008)	(0.010)
Number of living brothers	−0.001	0.004	−0.001	0.006	−0.004	0.007	0.011	0.014	−0.001	0.010
	(0.001)	(0.003)	(0.005)	(0.008)	(0.006)	(0.007)	(0.017)	(0.017)	(0.006)	(0.008)
Number of living sisters	−0.000	0.001	0.000	0.004	0.010*	−0.001	0.009	0.017	0.017**	0.011
	(0.002)	(0.002)	(0.007)	(0.007)	(0.006)	(0.007)	(0.020)	(0.019)	(0.007)	(0.010)
Constant	3.042***	2.633***	0.144	−0.544	0.015	−0.919	2.748	4.645***	1.669**	1.345
	(0.170)	(0.176)	(0.716)	(0.656)	(0.608)	(0.560)	(1.872)	(1.681)	(0.773)	(0.869)
Observations	21,715	27,897	21,715	27,897	21,715	27,897	21,715	27,897	21,715	27,897
Number of individuals	12,205	15,722	12,205	15,722	12,205	15,722	12,205	15,722	12,205	15,722

Notes: Individual fixed effects OLS estimates. Robust standard errors clustered at the individual level are reported in parentheses. Data come from the Survey of Health, Ageing and Retirement in Europe (SHARE), waves 1–7. Sample is restricted to individuals aged + 50 years old with at least two consecutive waves. Estimates also include wave fixed effects, but not shown for brevity. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A5

Additional results: omitting past inheritance expectation.

	BMI		Overweight		Obese		Mental health		Depressed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Inheritance since the previous wave	0.002	0.000	0.011	−0.008	−0.002	−0.003	0.008	0.059***	0.003	0.023**
	(0.001)	(0.002)	(0.008)	(0.008)	(0.006)	(0.006)	(0.020)	(0.019)	(0.008)	(0.010)
Expectation > 0 (one wave lagged)	–	–	–	–	–	–	–	–	–	–

Table A5 (*continued*)

	BMI		Overweight		Obese		Mental health		Depressed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Age	0.012***	0.014***	0.039***	0.039***	0.015*	0.019***	−0.129***	−0.128***	−0.046***	−0.041***
	(0.002)	(0.002)	(0.008)	(0.007)	(0.007)	(0.007)	(0.022)	(0.019)	(0.009)	(0.009)
Age^2/100	−0.009***	−0.011***	−0.029***	−0.033***	−0.011***	−0.014***	0.110***	0.093***	0.037***	0.034***
	(0.001)	(0.001)	(0.005)	(0.004)	(0.004)	(0.004)	(0.013)	(0.011)	(0.005)	(0.005)
Employed	0.003**	−0.001	0.017**	0.000	−0.009	−0.014**	−0.007	−0.016	−0.002	0.002
	(0.002)	(0.002)	(0.009)	(0.008)	(0.007)	(0.007)	(0.022)	(0.020)	(0.009)	(0.011)
Log of household income	−0.000	0.000	−0.001	0.002	−0.001	0.001	−0.001	−0.003	−0.001	−0.002
	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.004)	(0.004)	(0.001)	(0.002)
Log of household net worth (one wave lagged)	−0.000	−0.000**	−0.001	−0.000	0.000	−0.001	0.002	0.003	−0.000	0.001
	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)	(0.001)
Married	0.009*	0.008**	0.035*	0.011	0.033*	0.022*	−0.340***	−0.261***	−0.099***	−0.107***
	(0.005)	(0.004)	(0.021)	(0.014)	(0.019)	(0.013)	(0.061)	(0.038)	(0.026)	(0.019)
Household size	0.002	−0.000	0.010*	0.001	0.001	0.005	0.005	0.013	0.000	0.011
	(0.001)	(0.001)	(0.005)	(0.005)	(0.005)	(0.005)	(0.013)	(0.013)	(0.006)	(0.007)
Number of children	0.001	0.001	−0.002	0.005	0.004	0.004	0.009	−0.016	−0.001	−0.008
	(0.001)	(0.001)	(0.005)	(0.004)	(0.003)	(0.005)	(0.012)	(0.012)	(0.005)	(0.007)
Number of living brothers	−0.001	0.002	0.002	0.001	−0.001	0.002	−0.007	−0.012	−0.003	−0.001
	(0.001)	(0.001)	(0.004)	(0.005)	(0.005)	(0.004)	(0.012)	(0.012)	(0.005)	(0.005)
Number of living sisters	0.003*	0.001	0.009	0.007	0.013***	−0.001	−0.011	0.010	0.002	0.005
	(0.001)	(0.001)	(0.006)	(0.005)	(0.005)	(0.005)	(0.015)	(0.013)	(0.005)	(0.006)
Constant	2.901***	2.837***	−0.625	−0.571	−0.286	−0.463	3.806***	4.562***	1.652***	1.593***
	(0.118)	(0.104)	(0.438)	(0.387)	(0.403)	(0.342)	(1.142)	(0.983)	(0.489)	(0.502)
Observations	36,346	46,744	36,346	46,744	36,346	46,744	36,346	46,744	36,346	46,744
Number of individuals	16,735	21,120	16,735	21,120	16,735	21,120	16,735	21,120	16,735	21,120

Notes: Individual fixed effects OLS estimates. Robust standard errors clustered at the individual level are reported in parentheses. Data come from the Survey of Health, Ageing and Retirement in Europe (SHARE), waves 1–7. Sample is restricted to individuals aged + 50 years old with at least two consecutive waves. Estimates also include wave fixed effects, but not shown for brevity. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A6
Additional results: omitting inheritance receipt.

	BMI		Overweight		Obese		Mental health		Depressed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Inheritance since the previous wave	−	−	−	−	−	−	−	−	−	−
Expectation > 0 (one wave lagged)	−0.000	0.001	0.013	0.000	0.006	0.013	−0.019	−0.004	−0.009	0.003
	(0.003)	(0.003)	(0.013)	(0.012)	(0.011)	(0.010)	(0.033)	(0.031)	(0.013)	(0.015)
Age	0.012***	0.014***	0.039***	0.039***	0.014*	0.019***	−0.129***	−0.128***	−0.046***	−0.041***
	(0.002)	(0.002)	(0.008)	(0.007)	(0.007)	(0.007)	(0.022)	(0.019)	(0.009)	(0.009)
Age^2/100	−0.009***	−0.011***	−0.029***	−0.033***	−0.011***	−0.014***	0.110***	0.093***	0.037***	0.034***
	(0.001)	(0.001)	(0.005)	(0.004)	(0.004)	(0.004)	(0.013)	(0.011)	(0.005)	(0.005)
Employed	0.004**	−0.001	0.017**	0.000	−0.009	−0.014**	−0.007	−0.016	−0.002	0.002
	(0.002)	(0.002)	(0.009)	(0.008)	(0.007)	(0.007)	(0.022)	(0.020)	(0.009)	(0.011)
Log of household income	−0.000	0.000	−0.001	0.002	−0.001	0.001	−0.001	−0.003	−0.001	−0.002
	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.004)	(0.004)	(0.001)	(0.002)
Log of household net worth (one wave lagged)	−0.000	−0.000**	−0.001	−0.000	0.000	−0.001	0.002	0.003	−0.000	0.001
	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)	(0.001)
Married	0.009*	0.008**	0.034	0.012	0.033*	0.023*	−0.340***	−0.267***	−0.099***	−0.110***
	(0.005)	(0.004)	(0.021)	(0.014)	(0.019)	(0.013)	(0.061)	(0.038)	(0.026)	(0.019)
Household size	0.002	−0.000	0.010*	0.001	0.001	0.005	0.004	0.013	0.000	0.011
	(0.001)	(0.001)	(0.005)	(0.005)	(0.005)	(0.005)	(0.013)	(0.013)	(0.006)	(0.007)
Number of children	0.001	0.001	−0.002	0.005	0.004	0.004	0.010	−0.015	−0.001	−0.007
	(0.001)	(0.001)	(0.005)	(0.004)	(0.003)	(0.005)	(0.012)	(0.012)	(0.005)	(0.007)
Number of living brothers	−0.001	0.002	0.002	0.001	−0.001	0.002	−0.008	−0.012	−0.003	−0.001
	(0.001)	(0.001)	(0.004)	(0.005)	(0.005)	(0.004)	(0.012)	(0.012)	(0.005)	(0.005)
Number of living sisters	0.003*	0.001	0.009	0.007	0.013***	−0.001	−0.011	0.010	0.002	0.005
	(0.001)	(0.001)	(0.006)	(0.005)	(0.005)	(0.005)	(0.015)	(0.013)	(0.005)	(0.006)
Constant	2.900***	2.837***	−0.629	−0.571	−0.285	−0.455	3.804***	4.557***	1.652***	1.594***
	(0.118)	(0.104)	(0.438)	(0.387)	(0.404)	(0.342)	(1.142)	(0.983)	(0.489)	(0.502)
Observations	36,346	46,744	36,346	46,744	36,346	46,744	36,346	46,744	36,346	46,744
Number of individuals	16,735	21,120	16,735	21,120	16,735	21,120	16,735	21,120	16,735	21,120

Notes: Individual fixed effects OLS estimates. Robust standard errors clustered at the individual level are reported in parentheses. Data come from the Survey of Health, Ageing and Retirement in Europe (SHARE), waves 1–7. Sample is restricted to individuals aged + 50 years old with at least two consecutive waves. Estimates also include wave fixed effects, but not shown for brevity. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A7

Heterogeneity analysis: employed vs. non-employed individuals (individual fixed effects estimates).

	BMI		Overweight		Obese		Mental health		Depressed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Panel A. Employed individuals										
Inheritance since the previous wave	0.002	−0.001	0.005	−0.006	−0.009	0.005	−0.003	0.062*	−0.005	0.006
	(0.003)	(0.004)	(0.014)	(0.016)	(0.011)	(0.010)	(0.033)	(0.033)	(0.014)	(0.020)
d										
Observations	8987	8932	8987	8932	8987	8932	8987	8932	8987	8932
Number of individuals	5286	5231	5286	5231	5286	5231	5286	5231	5286	5231
Panel B. Non-employed individuals										
Inheritance since the previous wave	0.002	−0.001	0.018*	−0.018*	−0.001	−0.011	−0.004	0.060**	−0.001	0.026**
	(0.002)	(0.002)	(0.010)	(0.010)	(0.008)	(0.007)	(0.027)	(0.025)	(0.011)	(0.013)
Observations	27,359	37,812	27,359	37,812	27,359	37,812	27,359	37,812	27,359	37,812
Number of individuals	13,263	17,691	13,263	17,691	13,263	17,691	13,263	17,691	13,263	17,691

Notes: Robust standard errors at the individual level are reported in parentheses. Data come from the Survey of Health, Ageing and Retirement in Europe (SHARE), waves 1–7. Sample is restricted to individuals aged + 50 years old with at least two consecutive waves. Estimates also include wave fixed effects, but not shown for brevity. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A8

Heterogeneity analysis: married vs. unmarried individuals (individual fixed effects estimates).

	BMI		Overweight		Obese		Mental health		Depressed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Panel A. Married individuals										
Inheritance since the previous wave	0.001	0.003	0.010	−0.008	−0.000	0.003	0.000	0.031	0.000	0.015
	(0.002)	(0.002)	(0.009)	(0.009)	(0.007)	(0.007)	(0.022)	(0.022)	(0.009)	(0.012)
Observations	29,460	29,607	29,460	29,607	29,460	29,607	29,460	29,607	29,460	29,607
Number of individuals	13,710	13,571	13,710	13,571	13,710	13,571	13,710	13,571	13,710	13,571
Panel B. Unmarried individuals										
Inheritance since the previous wave	0.003	−0.005	0.005	−0.016	−0.004	−0.014	0.046	0.112***	0.021	0.039**
	(0.003)	(0.004)	(0.021)	(0.016)	(0.014)	(0.011)	(0.056)	(0.034)	(0.025)	(0.019)
Observations	6886	17,137	6886	17,137	6886	17,137	6886	17,137	6886	17,137
Number of individuals	3371	8331	3371	8331	3371	8331	3371	8331	3371	8331

Notes: Robust standard errors at the individual level are reported in parentheses. Data come from the Survey of Health, Ageing and Retirement in Europe (SHARE), waves 1–7. Sample is restricted to individuals aged + 50 years old with at least two consecutive waves. Estimates also include wave fixed effects, but not shown for brevity. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A9

Heterogeneity analysis: low- and highly-educated individuals (individual fixed effects estimates).

	BMI		Overweight		Obese		Mental health		Depressed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Panel A. Low-educated individuals										
Inheritance since the previous wave	0.002	−0.002	0.017*	−0.016	−0.006	−0.004	0.013	0.068***	0.008	0.035***
	(0.002)	(0.002)	(0.010)	(0.010)	(0.008)	(0.007)	(0.025)	(0.024)	(0.011)	(0.013)
Observations	27,849	37,874	27,849	37,874	27,849	37,874	27,849	37,874	27,849	37,874
Number of individuals	12,963	17,264	12,963	17,264	12,963	17,264	12,963	17,264	12,963	17,264
Panel A. High-educated individuals										
Inheritance since the previous wave	0.002	0.005*	−0.002	0.009	0.003	−0.002	−0.003	0.039	−0.006	−0.004
	(0.002)	(0.003)	(0.014)	(0.013)	(0.010)	(0.008)	(0.033)	(0.031)	(0.014)	(0.018)
Observations	8497	8870	8497	8870	8497	8870	8497	8870	8497	8870
Number of individuals	3772	3856	3772	3856	3772	3856	3772	3856	3772	3856

Notes: Robust standard errors at the individual level are reported in parentheses. Data come from the Survey of Health, Ageing and Retirement in Europe (SHARE), waves 1–7. Sample is restricted to individuals aged + 50 years old with at least two consecutive waves. Estimates also include wave fixed effects, but not shown for brevity. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A10

Heterogeneity analysis: age intervals (individual fixed effects estimates).

	BMI		Overweight		Obese		Mental health		Depressed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Panel A. 50–59 years old										
Inheritance since the previous wave	−0.000	0.005	0.015	0.004	−0.018	0.011	−0.028	0.062	−0.021	0.021
	(0.004)	(0.004)	(0.020)	(0.018)	(0.015)	(0.011)	(0.044)	(0.042)	(0.019)	(0.024)
Observations	7,259	9,805	7,259	9,805	7,259	9,805	7,259	9,805	7,259	9,805
Number of individuals	4,881	6,466	4,881	6,466	4,881	6,466	4,881	6,466	4,881	6,466
Panel B. 60–69 years old										
Inheritance since the previous wave	0.000	0.000	0.022*	−0.003	0.007	−0.017*	0.009	0.063**	0.022*	0.023
	(0.002)	(0.003)	(0.012)	(0.012)	(0.009)	(0.009)	(0.029)	(0.029)	(0.012)	(0.016)
Observations	14,581	18,712	14,581	18,712	14,581	18,712	14,581	18,712	14,581	18,712
Number of individuals	8,276	10,395	8,276	10,395	8,276	10,395	8,276	10,395	8,276	10,395
Panel B. 70–79 years old										
Inheritance since the previous wave	0.002	−0.003	−0.032	−0.025	−0.005	−0.002	−0.012	0.027	−0.023	0.034
	(0.003)	(0.005)	(0.023)	(0.023)	(0.013)	(0.017)	(0.064)	(0.054)	(0.027)	(0.027)
Observations	10,504	12,841	10,504	12,841	10,504	12,841	10,504	12,841	10,504	12,841
Number of individuals	5,981	7,311	5,981	7,311	5,981	7,311	5,981	7,311	5,981	7,311
Panel B. + 80 years old										
Inheritance since the previous wave	0.004	−0.029**	−0.025	−0.067	−0.031	0.006	0.025	0.173	0.000	0.141**
	(0.008)	(0.014)	(0.047)	(0.044)	(0.021)	(0.037)	(0.130)	(0.113)	(0.042)	(0.058)
Observations	4,002	5,386	4,002	5,386	4,002	5,386	4,002	5,386	4,002	5,386
Number of individuals	2,386	3,161	2,386	3,161	2,386	3,161	2,386	3,161	2,386	3,161

Notes: Robust standard errors clustered at the individual level are reported in parentheses. Data come from the Survey of Health, Ageing and Retirement in Europe (SHARE), waves 1–7. Sample is restricted to individuals aged + 50 years old with at least two consecutive waves. Estimates also include wave fixed effects, but not shown for brevity. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A11

Heterogeneity analysis: country groups (individual fixed effects estimates).

	BMI		Overweight		Obese		Mental health		Depressed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Panel A. Northern countries										
Inheritance since the previous wave	0.001	−0.003	0.011	−0.024	−0.012	−0.012	−0.026	0.079**	−0.014	0.029
	(0.003)	(0.003)	(0.016)	(0.015)	(0.012)	(0.010)	(0.033)	(0.033)	(0.014)	(0.018)
Observations	5,279	6,226	5,279	6,226	5,279	6,226	5,279	6,226	5,279	6,226
Number of individuals	1,910	2,198	1,910	2,198	1,910	2,198	1,910	2,198	1,910	2,198
Panel A. Southern countries										
Inheritance since the previous wave	0.005	−0.006	0.026	−0.011	0.008	−0.029*	0.016	0.200***	0.007	0.091***
	(0.005)	(0.006)	(0.023)	(0.028)	(0.023)	(0.017)	(0.070)	(0.069)	(0.025)	(0.034)
Observations	7,802	9,567	7,802	9,567	7,802	9,567	7,802	9,567	7,802	9,567
Number of individuals	3,400	4,042	3,400	4,042	3,400	4,042	3,400	4,042	3,400	4,042
Panel C. Western countries										
Inheritance since the previous wave	−0.000	0.004*	0.004	0.005	−0.001	0.007	0.003	0.013	0.006	0.001
	(0.002)	(0.002)	(0.011)	(0.010)	(0.007)	(0.008)	(0.028)	(0.025)	(0.012)	(0.014)
Observations	15,534	19,366	15,534	19,366	15,534	19,366	15,534	19,366	15,534	19,366
Number of individuals	7,199	8,798	7,199	8,798	7,199	8,798	7,199	8,798	7,199	8,798
Panel D. Eastern countries										
Inheritance since the previous wave	0.012	−0.000	0.034	−0.007	−0.002	−0.011	0.067	0.047	−0.015	0.032
	(0.008)	(0.006)	(0.029)	(0.026)	(0.031)	(0.021)	(0.078)	(0.063)	(0.040)	(0.033)

Table A11 (*continued*)

	BMI		Overweight		Obese		Mental health		Depressed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Observations	6,852	10,443	6,852	10,443	6,852	10,443	6,852	10,443	6,852	10,443
Number of individuals	3,683	5,392	3,683	5,392	3,683	5,392	3,683	5,392	3,683	5,392

Notes: Robust standard errors clustered at the individual level in parentheses. Data come from the Survey of Health, Ageing and Retirement in Europe (SHARE), waves 1–7. Sample is restricted to individuals aged $+50$ years old with at least two consecutive waves. Estimates also include wave fixed effects, but not shown for brevity. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A12

Heterogeneity analysis: inheritance taxes (individual fixed effects estimates).

	BMI		Overweight		Obese		Mental health		Depressed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Panel A. No inheritance tax										
Inheritance since the previous wave	0.010**	−0.004	0.014	−0.013	0.005	−0.013	0.022	0.108***	0.004	0.043**
	(0.004)	(0.004)	(0.019)	(0.015)	(0.014)	(0.012)	(0.041)	(0.035)	(0.019)	(0.020)
Observations	10,386	14,877	10,386	14,877	10,386	14,877	10,386	14,877	10,386	14,877
Number of individuals	5,284	7,403	5,284	7,403	5,284	7,403	5,284	7,403	5,284	7,403
Panel B. Inheritance tax										
Inheritance since the previous wave	−0.000	0.001	0.009	−0.006	−0.004	−0.000	0.006	0.042*	0.003	0.017
	(0.002)	(0.002)	(0.009)	(0.009)	(0.007)	(0.006)	(0.023)	(0.022)	(0.009)	(0.012)
Observations	25,960	31,867	25,960	31,867	25,960	31,867	25,960	31,867	25,960	31,867
Number of individuals	11,451	13,717	11,451	13,717	11,451	13,717	11,451	13,717	11,451	13,717

Notes: Robust standard errors clustered at the individual level in parentheses. Data come from the Survey of Health, Ageing and Retirement in Europe (SHARE), waves 1–7. Sample is restricted to individuals aged $+50$ years old with at least two consecutive waves. Estimates also include wave fixed effects, but not shown for brevity. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

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