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Abstract

Using a large sample of the Dutch working population, this study investigates if and how risk, time, and social preferences are affected by personal life events. Specifically, we investigate whether changes in marital status and parenthood are associated with changes in preferences. We elicit risk, time, and social preferences using survey questions where people provide self-assessed preferences (stated preferences) as well as methods where financial incentives are used and people can earn money (revealed preferences). Using register data of Statistics Netherlands, personal life events are linked with the elicited preferences of participants. Besides immediate effects of personal life events, we explore how long such effects last. Recent marriage is found to have some effect on revealed social preferences, but not on risk and time preferences. Recent divorce is associated with less revealed risk-taking and higher stated patience but has no effect on social preferences. Recent parenthood is associated with more revealed risk-taking and higher stated patience but not with social preferences.

Keywords: Life Events · Risk, Time, and Social Preferences · Temporal Stability

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1 Introduction

Life events such as marriage, divorce, and parenthood can precipitate a substantial change in how people live their lives. It changes everyday activities, expectations from others, and the position a person holds in society. Sociologists have therefore long studied the importance of life events as key determinants of how people's lives unfold (Bernardi et al., 2019). Despite this, psychologists generally hold that people's personality is so well-established by the time people reach adulthood that personality traits should be largely unaffected. Nevertheless, empirical studies have shown that life events can affect personality later in life (Bühler et al., 2023). In this paper, we therefore investigate whether life events also produce a shock to some fundamental characteristics that are considered to be important for economic behavior: people's time, risk, and social preferences.

Knowing when preferences change is important because preferences are fundamental exogenous variables in economic models (Becker, 1978). Some conclude from that that we should not argue about preferences, but that economists should rather look for explanations other than preferences to explain changes in behavior (Stigler and Becker, 1977). However, identifying differences in preferences has been used to explain differences in behavior between people (Croson and Gneezy, 2009) and populations (Chan et al., 2020). Time preferences correlate with saving decisions (e.g., Sutter et al., 2013; Falk et al., 2018), risk preferences play a role in investment decisions (e.g., Beauchamp et al., 2017; Dohmen et al., 2011; Menkhoff and Sakha, 2017), and social preferences affect people's willingness to donate money (e.g., Falk et al., 2018; Almas et al., 2020). Knowledge of preferences is similarly essential when providing advice, to the extent that many jurisdictions require financial service providers to ascertain their clients' risk preferences prior to providing advice or when making decisions on their client's behalf.

A number of studies examine the effect of life events on preferences (discussed in more detail in Section 2). In this paper, we contribute to this literature by investigating whether personal life events (marriage, divorce, and parenthood) affect risk, time, and social preferences. We do so by eliciting these preferences in a large heterogeneous sample of the Dutch population and linking participants' answers to register data from Statistics Netherlands (CBS). Our contribution is threefold. First, we assess fundamental economic preferences in three domains, which affect many crucial decisions such as career choices or saving and investment decisions. While risk preferences have received attention in the past, the impact of the personal life events we study on time and social preferences has not been directly examined before. Second, we elicit preferences using both quantitative incentivized tasks and qualitative self-reports, whereas existing studies rely on self-reports only. This allows us to directly examine whether different elicitation methods lead to different conclusions regarding the impact of life events on preferences. Third, we use register data to identify life events rather than relying on self-reports, thereby potentially reducing reporting errors and identifying life events in an inconspicuous manner.

We find that life events appear to have some short-run effects on risk, time, and social preferences. In particular, the observed effects are almost exclusively found for those individuals who experienced the life event in the most recent year before the study, whereas no effects are found for those who experienced the life event in the two years before that. For risk preferences, we find that people who divorced most recently took fewer risks in one of our revealed preference measures, but no effects are found for the other revealed preference measure and the stated preference measure. People who most recently had their first child took more risks in one of our revealed preference measures, but again no effects are found for the other revealed preferences. For time preferences, we find that people who most recently divorced or experienced first parenthood assess themselves as more patient. However, for both groups, no effects are found in the incentivized measures. Marriage is not found to affect time preferences. For social preferences, we find that people who married most recently behaved more pro-social, but no effect was found on the stated preference measure. Divorce and first parenthood are not found to affect social preferences.

The remainder of the paper is organized as follows. In Section 2, we review the literature on the effect of life and other events on preferences. In Section 3, we describe the procedures of the study, the design of experimental measures and survey questions, the life events that we consider from the CBS register data, and our identification strategy. The results are presented in Section 4. Section 5 provides a discussion and concludes.

2 Related Literature

Given the obvious impact of life events on the way people live their lives it is not surprising that a substantial body of literature has studied the impact of life events on behavior. For example, Bertocchi et al. (2011), Christiansen et al. (2015), Love (2009), and Zetterdahl (2015) find significant effects of changes in marital status (such as marriage, divorce, or loss of partner) on financial behavior. However, a change in marital status often also implies a change in financial resources, circumstances, and responsibilities, which may directly lead to a change of behavior without a change in preferences. Therefore, such studies do not allow us to draw inferences about the effect of life events on preferences. Important direct evidence on this matter is provided by Hanewald and Kluge (2014) using the German Socioeconomic Panel (GSOEP). They find that married people hold riskier investments, but at the same time, they state to be less willing to take risks compared to singles. This seemingly contradictory observation suggests that the riskier investment may be due to a change in circumstances and/or risk capacity that comes with marriage, rather than with a change in risk preferences, emphasizing the importance of direct measures of preferences rather than measures of related behavior.

In addition to Hanewald and Kluge (2014), several other studies consider the effect of personal life events on risk preferences directly, using stated preference measures. Browne et al. (2016) and Görlitz and Tamm (2020) investigate the impact of several life events on stated risk preferences, using longitudinal data from the GSOEP. Browne et al. find that people who marry or become parents state to be more risk-averse. Separation from a partner, but not divorce, is found to correlate with reduced stated risk aversion. Görlitz and Tamm focus on the effect of becoming a parent and consider when a change in risk preferences occurs, relative to the birth, and how long this lasts. They find that both men and women state higher risk aversion already before the birth of their first child and a few years after that before the stated risk preference converges back to the original level. At the same time, this shift in stated risk preferences is not found to translate into less risky behavior in the labor market (examined by looking at risks of injury at work and the variance of earnings). Kettlewell (2019) explores the impact of a variety of life events in a panel data set of Australian households, based on a survey measure of self-assessed risk preferences, and finds that risk aversion is stronger shortly after the birth of the first child and that this effect vanishes in subsequent periods. Research on the effect of life events on time and social preferences is substantially less common and direct evidence on the effect of marriage, divorce, or parenthood on either social or time preferences is nonexistent.¹

Indirect evidence for the impact of life events on preferences is provided by studies that do not look at individual life events, but large-scale societal shocks such as natural disasters or economic crises. Chuang and Schechter (2015) review this literature and conclude that the

¹For time preferences, there is some evidence that a negative income shock leads to more impulsive decisions (Mellis et al., 2018). For social preferences, Vollhardt (2009) proposes that altruism is "born of suffering" and cites supporting empirical studies for the idea that negative life events increase altruism. This empirical basis consists mostly of clinical psychological studies and considers relatively extreme and traumatic events. It is unclear how such an effect could be extrapolated to the more "mundane" life events that we study.

evidence provided by this literature is inconclusive. Sometimes such events appear to have an effect, but at other times not, without a clear picture emerging of either characteristics of the event or the environment in which it occurs explaining the presence, absence, or direction of effects. Recently a substantial body of literature on the effect of the COVID-19 pandemic on risk, time, and social preferences has been added to this. Umer (2023) reviews this literature which, similar to the literature on society-wide events, does not yield a uniform picture either. Some studies find significant effects, but often in opposite directions, while other studies find no significant change in preferences during the COVID-19 pandemic.²

3 Data and Methods

We start by introducing our sample and data collection procedures. Then, we discuss our methods for eliciting risk, time, and social preferences using both revealed and stated preference elicitation methods. Lastly, we describe the life events we consider (marriage, divorce, and first parenthood) and our identification strategy.

3.1 Data Collection

The data were collected in a two-wave online survey in May and June of 2020 conducted in collaboration with CBS and research agency Flycatcher. CBS selected the stratified random sample, which allowed us to link the survey and experimental data with register data. Flycatcher programmed the online survey and experiments and collected the data. A total of 18,000 Dutch employees and 18,000 self-employed were randomly selected and invited through physical letters to participate in the online study (see Appendix B for screenshots of the letters translated to English).³ In total, 4,282 Dutch residents completed both waves. Data from the survey are enriched with demographic and socioeconomic variables from register data of CBS. Table 1

²Further indirect evidence comes from the literature on the impact of life events on personality in psychology. This literature is extensive and, just as the economics literature on preferences, often finds contradictory results. However, given the extensive nature of the literature, there is room for a meta-analysis to illuminate overall patterns. Bühler et al. (2023) performed such a meta-analysis, which includes results for the three life events we consider. Neither marriage nor child-birth appears to have a substantial effect on any of the Big 5 personality dimensions, although child-birth has a consistently negative effect on self-esteem and life satisfaction. Divorce does however appear to affect many dimensions of personality, decreasing emotional stability and increasing both agreeableness and openness. How such changes might relate to changes in preferences is not self-evident. However, it might suggest that divorce is more likely to have an impact on preferences than marriage or parenthood, as is the case for personality.

³The survey was part of a larger project "Understanding and Improving Pension Savings", which focused explicitly on the self-employed and hence self-employed individuals were over-sampled.

reports basic demographics of the sample.

| | Mean | SD | Min | Max | Ν |
|--------------------------------|-------------|---------|----------|------------------|-------|
| Individual Characteristics | | | | | |
| Marital Status (=Single) | 0.32 | 0.47 | 0 | 1 | 4,282 |
| Marital Status (=Married) | 0.59 | 0.49 | 0 | 1 | 4,282 |
| Marital Status (=Widowed) | 0.01 | 0.09 | 0 | 1 | 4,282 |
| Marital Status (=Divorced) | 0.09 | 0.28 | 0 | 1 | 4,282 |
| Parenthood (=Yes) | 0.67 | 0.47 | 0 | 1 | 4,282 |
| Sex $(=Female)$ | 0.43 | 0.50 | 0 | 1 | 4,282 |
| Age | 47.44 | 12.19 | 20 | 87 | 4,282 |
| Occupation (=Employee) | 0.56 | 0.50 | 0 | 1 | 4,282 |
| Occupation (=Self-Employed) | 0.35 | 0.48 | 0 | 1 | 4,282 |
| Occupation $(=Other)$ | 0.09 | 0.28 | 0 | 1 | 4,282 |
| Migration Background (=Native) | 0.87 | 0.34 | 0 | 1 | 4,282 |
| Education Level $(=Low)$ | 0.04 | 0.21 | 0 | 1 | 4,282 |
| Education Level (=Middle) | 0.25 | 0.43 | 0 | 1 | 4,282 |
| Education Level (=High) | 0.44 | 0.50 | 0 | 1 | 4,282 |
| Education Level (=Unknown) | 0.26 | 0.44 | 0 | 1 | 4,282 |
| Cognitive Reflection | 1.56 | 1.11 | 0 | 3 | 4,282 |
| Financial Literacy | 3.43 | 1.15 | 0 | 5 | 4,282 |
| Household Characteristics | | | | | |
| Household Wealth | $372,\!474$ | 769,906 | -949,069 | $20,\!337,\!954$ | 4,276 |
| Household Income | $44,\!350$ | 80,122 | -23,839 | $4,\!844,\!076$ | 4,276 |

Table 1: Descriptive Statistics - Individual and Household Characteristics

Notes: Data refers to January 1, 2020 (for the variables marital status, children, occupation, education level, household wealth, and household income) or to the date on which the participant filled in the first wave of the survey (for the variable age). Marital status (=married) includes registered partnership. Household income refers to disposable income and is adjusted for size and composition of the household. Household wealth and income may be negative for self-employed individuals who incurred losses with their business and six observations are missing. Cognitive reflection and financial literacy were asked in the second wave of the survey using three questions from the cognitive reflection test (Frederick, 2005) and five financial literacy questions (Lusardi and Mitchell, 2014), respectively.

The survey included a large set of measures in the same order for each participant.⁴ The median completion time was 46 and 51 minutes respectively in Waves 1 and 2. One in five participants, among those who completed both waves, was randomly selected for payment based on their decisions in one randomly selected incentivized task. Possible earnings ranged from $\notin 0$ up to $\notin 186$ depending on the task. The average earning among the participants selected for payment was $\notin 77.10$ (SD = 41.33).⁵ In addition, one iPad was raffled off among the participants who completed both waves. Participants were fully informed about the procedures in advance.

⁴In addition to risk, time, and social preferences, the study collected other incentivized experiments and survey measures, not reported here. See http://bit.ly/pbbs-main for a complete overview of the material.

⁵Participants thefore earned $\in 15.42$ on average, which is roughly 50% above the net hourly minimum wage in the Netherlands at the time of the study (this was $\in 9.70$ per hour for a 40-hour workweek, see https://bit.ly/wage-Dutch, last retrieved May 2023).

3.2 Preference Measures

We elicited risk, time, and social preferences using both revealed and stated preference methods. Revealed risk and time preferences were elicited jointly in Wave 1 with the convex time budget (CTB; Andreoni and Sprenger, 2012) and separately in Wave 2 with several multiple price lists (MPLs) in the spirit of Holt and Laury (2002) and Coller and Williams (1999), respectively. Revealed social preferences were elicited in wave 1 with a modified version of the solidarity game by Selten and Ockenfels (1998). Stated preferences were elicited in both waves with the general risk question (GRQ), general time question (GTQ), and altruism question (AQ) following Falk et al. (2022). Below, we discuss the methods (see Appendix C for more details) and how preferences are inferred from decisions. All measures are standardized (z-score) for analysis.

CTB. We implemented an adapted version of the CTB (Andreoni and Sprenger, 2012), which jointly elicits risk and time preferences. In our implementation, adapted from Potters et al. (2016), participants received two sets of 12 decision tasks sequentially.⁶ In each decision task, participants were asked how they would like to divide a budget of \in 75 between an earlier date, 8 weeks from the day of participation, and a later date, either 16 weeks or 24 weeks from the day of participation. Money allocated to the early date was always paid out with certainty, whereas money allocated to later dates was paid with a 100%, 90%, 70%, or 50% chance. In addition, money allocated to the later date paid an interest rate of 0%, 4%, or 16% over the delay period. To simplify the decisions, each choice set was discretized into 13 predefined allocations. Two of the predefined allocations constituted dominated choices, which serve as a comprehension and attention check.⁷

We take the following approach to infer risk and time preferences from participants' decisions. For risk preferences, we compare allocations in decision tasks with risk (that is, the decision situations where the later payoff was obtained with a 90%, 70%, or 50% chance) to allocations in their risk-free counterpart (that is, the decision situation where the later payoff was obtained with a 100% chance) and classify each pair as a risk-averse, risk-neutral, or risk-seeking choice. Specifically, a pair of allocations is classified as risk-neutral if the participant allocates the same amount of money in both tasks, risk-averse if the participant allocates more money to the early

⁶One additional practice task that participants received is excluded from the analysis.

⁷For example, in decision #1 participants could choose between the following allocations: [70,0]; [75,0]; [67.50,7.50]; [60,15]; [52.50,22.50]; [45,30]; [37.50,37.50]; [30,45]; [22.50,52.50]; [15,60]; [7.50,67.50]; [0,75]; [0,70]. The first and the last allocation are dominated as they yield less money with certainty. In total, there are 513 (12%) participants who make at least one dominated choice in the CTB tasks. We control for dominated choices in further analyses.

period in the task that involves risk (compared to its risk-free counterpart), and risk-seeking if the participant allocates less money to the early period in the task that involves risk (compared to its risk-free counterpart).⁸ To create an aggregate measure, we count the number of choices classified as risk-averse (with weight=-1), risk-neutral (with weight=0), and risk-seeking (with weight=1) separately for the two different time periods (i.e., 8 and 16 weeks and 8 and 24 weeks) and then take the average (hereafter "rCTB"). Larger values of this variable are thus associated with a stronger tendency of the participant to take risks in the task.

For time preferences, we simply take the average euro amount a participant allocates to late period in risk-free decision situations, thus, decision situations where the later payoff was obtained with a 100% chance (hereafter "tCTB"). Larger values for this variable are thus associated with more patience of the decision-maker. This measure is therefore based on six decisions as each participant was confronted with three different implied interest rates (0%, 4%, or 16% over the period of delay) for two delay durations (8 or 16 additional weeks).

MPL. We implemented several MPLs to elicit risk and time preferences separately in the spirit of Holt and Laury (2002) and Coller and Williams (1999), respectively. An MPL is a list of binary decision situations. For risk preferences, participants are asked to choose between a safer and riskier lottery in each decision situation. The list is designed such that either the safer or the riskier lottery becomes more attractive when moving down the list. The point where the participant switches to the option that becomes more attractive provides an indication of the risk preference. In this study, participants made ten choices in each MPL. We take the average number of risky lottery choices over all five MPLs as a measure for risk preference (hereafter "rMPLs").⁹ Larger values of this variable are thus associated with a stronger tendency of the participant to take risks in the task.

For time preferences, participants are asked to choose between an early and late payment in each decision situation. The list is designed such that waiting for the late payment becomes more attractive when moving down the list. The point where the participant switched to the option at the later date provides an indication of their time preference. In this study, participants made nine binary decisions between \in 75 at an early date (8 weeks from the day of participation) and varying amounts at a later date (16 or 24 weeks from the day of participation). Moving down

⁸If an individual makes a corner choice in both the decision with risk and their risk-free counterpart, then we categorize the pairs of corner choices at the early (late) date as risk-averse (seeking).

 $^{^{9}}$ We implemented three different types of MPLs, see Appendix C. In Bokern et al. (2023), we show that correlations between the different types of MPLs range from .60 to .88 when controlling for measurement error.

the list, the amounts at the later date increased, yielding interest rates between 0% and 26.7% over the delay period. We take the average number of later date choices over both MPLs as a measure for time preference (hereafter "tMPLs"). Thus, higher values for this measure imply more patience of the decision-maker.¹⁰

Solidarity Game. We implemented a modified version of the solidarity game by Selten and Ockenfels (1998) to elicit social preferences. In our implementation, following Riedl et al. (2019), participants were anonymously matched with another participant in the study and were informed that one of the following four possible situations could occur: (i) both participants receive \in 80 (with 50% probability), (ii) they receive \in 80 but the matched other receives nothing (with 20% probability), (iii) they receive nothing but the matched other receives \in 80 (with 20% probability), (iii) they receive nothing but the matched other receives \in 80 (with 20% probability), (iii) both receive nothing (with 10% probability). We then elicited solidarity preferences towards different age groups using the strategy method (Selten, 1967). Specifically, for situation (ii) in which they received money and the other did not, they had to decide how much they were willing to transfer if their matched other was (a) a young participant (between 16 and 34 years), (b) a middle-aged participant (between 35 and 64 years), and (c) an old participant (65 years and older). We take the average amount of money sent over all age groups as a measure for solidarity preferences (hereafter "SG"). Larger values of this variable are thus associated with higher pro-social preferences in the task.

GRQ, GTQ, AQ. These self-reported survey questions are based on the work by Falk et al. (2022). For risk preferences (GRQ), participants self-identify as being more or less willing to take risk in general on an 11-point Likert scale from "not at all willing to take risks" (0) to "very willing to take risk" (10). For time preferences (GTQ), participants identified themselves as being more or less willing to give something up today to benefit from it in the future on an 11-point Likert scale ranging from "not at all willing" (0) to "very willing" (10). The question was asked twice, once referring to the near future and once referring to the distant future. We take the average of both questions.¹¹ For social preferences (AQ), participants self-identified as being more or less willing to give to a good cause without expecting anything in return on an

¹⁰We did not enforce consistency in participants' choices in the MPLs, meaning that participants could switch multiple times as well as in the "wrong" direction (i.e., the option that is becoming less attractive). Moreover, we include a dominated option in two MPLs for risk preferences. The number of participants who make at least one inconsistent choice in the MPLs is 739 (17%) for risk preferences and 167 (4%) for time preferences. The number of participants who make at least one dominated choice in the MPLs for risk preferences is 283 (7%). We control for inconsistent and dominated choices in further analyses.

¹¹The Pearson correlation between these two measures is 0.76 in Wave 1 and 0.73 in Wave 2.

11-point Likert scale ranging from "not at all willing" (0) to "very willing" (10). All survey questions were asked in both waves of the study. We use the average response for our analysis.

Table 2 provides summary statistics of our preference measures. The table reports the measures in their original unit, but the data are standardized (z-score) for later analysis.

| | Unit | Mean | SD | Mdn | Min | Max | Ν |
|----------------------|---|-------|-------|-----|-----|-----|-------|
| Risk | | | | | | | |
| rCTB | Σ RA (-1), RN (0), RS (1) Choices, Avg over 2 Sets | -3.52 | 4.64 | -4 | -9 | 9 | 4,282 |
| rMPL | # Risky Choices $(0-10)$, Avg over 5 MPLs | 3.83 | 1.68 | 4 | 0 | 10 | 4,282 |
| GRQ | Likert Item (0-10), Avg over 2 Items* | 5.61 | 1.81 | 6 | 0 | 10 | 4,282 |
| Time | | | | | | | |
| tCTB | Avg \in allocated to future in risk-less choices | 43.21 | 17.87 | 50 | 0 | 75 | 4,282 |
| tMPL | # Patient Choices (0-9), Avg over 2 MPLs | 4.35 | 2.59 | 5 | 0 | 9 | 4,282 |
| GTQ | Likert Item (0-10), Avg over 2 Items [*] | 6.61 | 1.63 | 7 | 0 | 10 | 4,282 |
| Social | | | | | | | |
| SG | Avg \in (out of \in 80) sent to others | 26.76 | 16.53 | 30 | 0 | 80 | 4,282 |
| AQ | Likert Item (0-10), Avg over 2 Items $*$ | 6.31 | 2.19 | 7 | 0 | 10 | 4,282 |

Table 2: Descriptive Statistics - Risk, Time, and Social Preference Measures

Notes: The table lists summary statistics for the risk, time, and social preference measures considered in our study. RA = Risk Averse, RN = Risk Neutral, RS = Risk Seeking. *We asked the same question in both waves.

3.3 Life Events

The register data from CBS allows us to identify life events that potentially have an impact on preferences. In particular, we focus on marriage, divorce, and first parenthood. These three life events are commonly studied and it is likely that they have an influence on people's lives and position in society. To identify these events, we consider changes in the participants' marital status or number of children. Given that the CBS data are on an annual basis, we classify participants according to their status at the start of each calendar year and compare this to their status at the start of the previous calendar year. For example, marital status is recorded as either single, married, divorced, or widowed. If an individual is classified as married in year T (i.e., start of 2020) but not in T - 1 (i.e., start of 2019), then we infer that the individual has experienced the life event "marriage" in year T = 2019. Similarly, a person not classified as divorced in year T. As to parenthood, we track the number of children that an individual has. If this number increased from zero in year T - 1 to more than zero in year T, we know that the individual became a parent for the first time in year T.

Table 3 lists the frequency of the different life events (marriage, divorce, and first parenthood)

| | 2019 | 2018 | 2017 |
|-------------------|------|------|------|
| Married | | | |
| Observations | 64 | 82 | 69 |
| % of Total Sample | 1.5 | 1.9 | 1.6 |
| Divorced | | | |
| Observations | 21 | 21 | 29 |
| % of Total Sample | 0.5 | 0.5 | 0.7 |
| First Parenthood | | | |
| Observations | 61 | 57 | 41 |
| % of Total Sample | 1.4 | 1.3 | 1.0 |

Table 3: Descriptive Statistics - Life Events

Notes: The table lists the number of individuals who experienced a specific life event in the three years (2017-2019) prior to the study. The total number of participants in our study is N = 4,282.

in our sample. The table shows that in each time period, the different life events are experienced by a relatively small number of individuals. For instance, 64 individuals in our sample (or 1.5%of the observations) married in 2019, the year before our study was conducted. A similar number of individuals got married in other years. As can be expected, the number of individuals who get divorced is even smaller, with 21 (0.5%) in 2018 and 2019, and 29 (0.7%) in 2017. Finally, the number of individuals in our sample who experienced first parenthood ranges between 41 (1.0%) in 2017 and 61 (1.4%) in 2019.

3.4 Identification strategy

To analyze the effects of life events on preferences, we take the following approach. We regress the relevant preferences measure on three dummy variables that indicate whether a participant experienced the life event in question in any of the three years preceding the survey. We run such regressions for each of the three life events we study.¹² To these regressions, we add demographic, socioeconomic, and individual background characteristics of the participant. These background characteristics include the states associated with the life events we study, i.e. dummy variables for parenthood and marital status.

¹²Controlling for one life event when looking at the impact of another life event, might be preferable from an econometric perspective. If the experiences are correlated, as it may be, including only dummy variables of one event could lead to biased coefficients. However, participants experiencing multiple life events are sufficiently rare that such a bias is unlikely to be substantial. For ease of presentation, we present separate regressions for each of the three life events studied in the following section. For completeness, Table A5 in Appendix A presents results of regression analyses where all life events are simultaneously included. This additional analysis does not result in different conclusions.

The estimated coefficients of the life event dummy variables show whether participants who recently experienced a life event exhibit different preferences than participants who experienced the life event less recently (i.e., more than three years ago). For example, a person who has experienced the life event "marriage" in 2019 is identified as both married and recently married, while someone who has been married for more than three years is simply identified as married, but not as recently married. Moreover, the combined effect of the life event dummy variables and the demographic status variables of the life event in question inform us whether participants who experienced the life event recently are different in their preferences from those who never experienced the life event. For example, we can compare a recently married person with a single person (the reference category of our marital status variable) by taking the sum of the estimated effects of being married and being recently married. In a similar manner, we can compare a recently divorced person with someone who divorced more than three years ago or with a married person, and someone who recently experienced first parenthood with individuals who experienced first parenthood longer than three years ago and individuals without children.

Importantly, our data allows us only to identify short-term effects of life events. Any longterm or permanent effects of life events will not be captured by our life event dummy variables, but rather by the relevant demographic controls. The coefficients of these demographic controls cannot be interpreted causally because this could either indicate a difference between people more or less likely to experience a life event or a long-term effect of the life event. For example, if we find that married people are more risk-averse than single people that could be because marriage makes people permanently more risk-averse, or because risk-averse people are more likely to be married. The effect of having experienced a life event in a particular year has a more plausible causal interpretation because, in this case, we are comparing only those who experienced the life event, but at different points in time. Any difference can therefore plausibly be attributed to the recency of the event, rather than to a prior difference between people experiencing the life event.

4 Results

We start by investigating how our risk, time, and social preference measures relate to demographic and socioeconomic background characteristics of participants. Then, we discuss how our preference measures are affected by recently experiencing marriage, divorce, or first parenthood respectively.

4.1 Preferences and Individual Characteristics

As a first step, we explore how our preference measures relate to the demographic and socioeconomic background of our participants. We estimate simple OLS regression models with our preference measures as dependent variables. In all models, our independent variables include demographic characteristics (marital status, children y/n, sex, age¹³, and migration background), socioeconomic characteristics (occupation status, education, wealth, and income), cognitive skills (financial literacy and cognitive reflection)¹⁴, and variables measuring participants' understanding of experimental tasks, both subjectively (understanding of instructions and confidence in choices for the CTB, the rMPLs, the tMPLs, and the SG) and objectively (number of inconsistent choices in the rMPLs and the tMPLs and dominated choices in the CTB and the rMPLs).

Table 4 presents the regression results. The table reveals several interesting patterns as well as discrepancies between revealed and stated preference measures. Concerning risk preferences, we find in models (1), (2), and (3) that women are less willing to take risks compared to men (p < 0.001 for all), self-employed individuals are more willing to take risks compared to employees (p = 0.029, p = 0.035, p < 0.001, respectively), and individuals in the highest income tertile are more willing to take risks compared to those in the lower income tertile (p = 0.019, p < 0.001,p < 0.001, respectively). In addition, we find evidence in favor of a U-shaped pattern for age in all three models (joint significance tests of age and age-squared yield p = 0.037, p < 0.001, p < 0.001, respectively for models 1, 2, and 3). These results are in line with previous studies (e.g., Dohmen et al., 2011; Donkers et al., 2001; Falk et al., 2018; von Gaudecker et al., 2011). People who are married state to have a lower willingness to take risks compared to singles (model 3, p < 0.001), which is consistent with the findings of Dohmen et al. (2011), but they do not differ in their risk-taking in revealed preference methods (models 1 and 2). In a similar vein, people with children state to have a higher willingness to take risks compared to people without children (model 3, p < 0.001), but no differences are found in revealed preference methods (models 1 and 2). Finally, cognitive factors (financial literacy and CRT) are correlated with the GRQ and the rMPLs, but not the rCTB. In particular, individuals with higher scores on CRT state to be less willing to take risks (p < 0.001), but take more risks in the rMPLs (p = 0.001). Individuals with higher scores on financial literacy state to be more willing to take risks (p < 0.001) and take

 $^{^{13}}$ A squared age term is added to the regressions for risk preferences as the data suggests that there is a nonlinear relationship between age and risk preferences.

¹⁴Financial literacy is measured with five questions from Lusardi and Mitchell (2014) and cognitive reflection is measured with three questions form the cognitive reflection test (CRT) by Frederick (2005).

more risks in the rMPLs (p = 0.017).

Concerning time preferences, we find that higher education and cognitive reflection are both associated with more patience across all measures (p = 0.029) for high education in model 4, and p < 0.001 otherwise). This relation between patience and education is in line with Perez-Arce (2017), but opposed to Tawiah (2022). Women and married individuals state to be less patient compared to men (p < 0.001) and singles (p = 0.041), respectively, but do not differ in their patience in revealed preference methods. Previous studies on this topic more commonly found that women are more patient than males (Martorano et al., 2015 review the literature), although Martorano et al. add to this literature and find, as we do, that women appear less patient. Age is negatively related to stated patience (p < 0.001), but not with behavior in the incentivized tasks. Self-employed individuals state to be more patient than employees (p < 0.001) but are less patient in both the tMPLs (p = 0.025) and the tCTB (p = 0.006), which goes against Andersen et al. (2014) who found that (Danish) entrepreneurs were more patient in incentivized tasks. Higher financial literacy is also associated with higher stated patience (p < 0.001) but does not affect behavior in revealed preference methods. Natives are more patient than non-natives in both the tCTB (p < 0.001) and tMPLS (p = 0.009) but do not differ from non-natives in their stated patience. Finally, higher wealth is associated with more patience in the tMPLs, but not the tCTB. Individuals in the highest wealth tertile also state to be more patient compared to those in the lowest tertile (p < 0.001). A positive relation between patience and wealth is in line with the findings of Epper et al. (2020).

Concerning social preferences, we find that demographics overall have little explanatory power in the SG. We do observe a positive relationship with age (p < 0.001), which we also observe for stated altruism (p < 0.001), and is commonly found in the literature (Sparrow et al., 2021). For stated altruism, we find that women (p < 0.001), people with higher cognitive reflection (p = 0.046), and people in the highest income quintile state to be more altruistic (p = 0.002). In addition, people with a higher education level state to be more altruistic compared to people with a middle education level (p < 0.001), whereas those with a lower education level state to be less altruistic (p = 0.001). Higher altruism for women is a common finding in the literature (Croson and Gneezy, 2009), but note that in contrast to this literature, we only find a gender effect in self-reported altruism and not in revealed solidarity.

| | Ris | k Prefere | nces | Tir | ne Prefere | nces | Social P | references |
|------------------------------------|------------------|------------------|----------------------|---------------------|---|-----------------|------------------|------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| | rCTB | rMPL | GRQ | tCTB | tMPL | GTQ | \mathbf{SG} | AQ |
| Marital Status (=Married) | -0.00 | -0.01 | -0.20*** | -0.07 | -0.05 | -0.08* | 0.05 | 0.00 |
| | (0.04) | (0.02) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) |
| Marital Status (=Widowed) | -0.30* | 0.05 | -0.15 | 0.15 | 0.05 | 0.18 | 0.02 | -0.18 |
| | (0.12) | (0.10) | (0.15) | (0.17) | (0.12) | (0.15) | (0.18) | (0.13) |
| Marital Status (=Divorced) | 0.11 | 0.00 | 0.08 | -0.04 | -0.04 | 0.09 | 0.01 | -0.04 |
| | (0.07) | (0.03) | (0.06) | (0.07) | (0.06) | (0.06) | (0.06) | (0.06) |
| Parenthood $(=$ Yes $)$ | 0.06 | 0.04 | 0.15^{***} | -0.01 | -0.02 | 0.04 | -0.04 | -0.03 |
| | (0.04) | (0.02) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) |
| Sex (=Female) | -0.22*** | -0.12*** | -0.34^{***} | 0.06 | 0.05 | -0.12^{***} | 0.04 | 0.29^{***} |
| | (0.03) | (0.02) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) |
| Age | -0.02 | -0.02** | -0.05*** | 0.00 | -0.00 | -0.02*** | 0.01^{***} | 0.01^{***} |
| | (0.01) | (0.01) | (0.01) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) |
| Age Squared | 0.00 | 0.00** | 0.00*** | | | | | |
| | (0.00) | (0.00) | (0.00) | an an a she she she | | | | |
| Migration Background $(=Native)$ | 0.03 | 0.01 | 0.03 | 0.21*** | 0.11** | -0.02 | 0.03 | -0.09 |
| | (0.04) | (0.02) | (0.04) | (0.05) | (0.04) | (0.05) | (0.04) | (0.05) |
| Occupation Status (=Self-Employed) | 0.08* | 0.04* | 0.35*** | -0.09** | -0.07* | 0.18*** | 0.07 | 0.04 |
| | (0.04) | (0.02) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) |
| Occupation Status (=Other) | -0.01 | -0.01 | 0.13^{*} | -0.14* | -0.05 | 0.08 | 0.02 | 0.02 |
| | (0.06) | (0.03) | (0.06) | (0.06) | (0.05) | (0.06) | (0.06) | (0.06) |
| Education Level $(=Low)$ | 0.04 | -0.05 | 0.02 | -0.00 | 0.03 | -0.07 | -0.03 | -0.28** |
| | (0.08) | (0.04) | (0.07) | (0.08) | (0.07) | (0.08) | (0.09) | (0.09) |
| Education Level (=High) | 0.04 | 0.02 | -0.02 | 0.08^{*} | 0.18^{***} | 0.14^{***} | 0.05 | 0.17^{***} |
| Education Level (=Unknown) | $(0.04) \\ 0.06$ | $(0.02) \\ 0.00$ | $(0.04) \\ 0.01$ | (0.04) -0.02 | $\begin{pmatrix} 0.03 \end{pmatrix} \ 0.05$ | (0.04) -0.01 | $(0.04) \\ 0.06$ | $(0.04) \\ 0.00$ |
| Education Level (=Onknown) | (0.05) | (0.00) | (0.01) | (0.02) | (0.03) | (0.01) | (0.00) | (0.05) |
| Household Wealth (Quintile=2) | (0.03) 0.09 | (0.02) 0.03 | -0.07 | 0.09 | (0.04) 0.14^{**} | 0.04) | (0.04) 0.05 | -0.05 |
| Household Weath (Quintile=2) | (0.05) | (0.03) | (0.05) | (0.05) | (0.04) | (0.05) | (0.05) | (0.05) |
| Household Wealth (Quintile=3) | 0.06 | -0.05 | -0.10^{*} | 0.05 | 0.13^{**} | 0.06 | -0.07 | -0.06 |
| fibuscilota (vealiti (Quintile=5) | (0.05) | (0.03) | (0.05) | (0.05) | (0.04) | (0.05) | (0.05) | (0.05) |
| Household Wealth (Quintile=4) | 0.06 | -0.03 | -0.20*** | 0.07 | 0.24^{***} | 0.10 | -0.06 | -0.03 |
| | (0.05) | (0.03) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) |
| Household Wealth (Quintile=5) | 0.05 | -0.01 | -0.06 | 0.10 | 0.31*** | 0.25*** | -0.11 | -0.07 |
| | (0.06) | (0.03) | (0.06) | (0.06) | (0.05) | (0.06) | (0.06) | (0.06) |
| Household Income (Quintile=2) | 0.00 | 0.01 | 0.03 | 0.07 | -0.02 | -0.03 | 0.05 | -0.09 |
| | (0.05) | (0.03) | (0.05) | (0.05) | (0.04) | (0.05) | (0.05) | (0.05) |
| Household Income (Quintile=3) | 0.02 | 0.03 | 0.08 | 0.01 | -0.03 | 0.01 | 0.07 | 0.01 |
| | (0.05) | (0.03) | (0.05) | (0.05) | (0.04) | (0.05) | (0.05) | (0.05) |
| Household Income (Quintile=4) | 0.09 | 0.07^{**} | 0.19^{***} | 0.11^{*} | -0.04 | 0.02 | 0.06 | 0.07 |
| | (0.05) | (0.03) | (0.05) | (0.05) | (0.04) | (0.05) | (0.05) | (0.05) |
| Household Income (Quintile=5) | 0.13^{*} | 0.12^{***} | 0.23^{***} | 0.08 | -0.10^{*} | 0.03 | 0.06 | 0.17^{**} |
| | (0.05) | (0.03) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) |
| Cognitive Reflection | 0.01 | 0.03^{***} | -0.07^{***} | 0.09*** | 0.09^{***} | 0.07^{***} | -0.00 | 0.03^{*} |
| | (0.02) | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |
| Financial Literacy | 0.02 | 0.02^{*} | 0.08^{***} | 0.02 | 0.02 | 0.10^{***} | -0.02 | 0.02 |
| | (0.02) | (0.01) | (0.01) | (0.02) | (0.01) | (0.01) | (0.01) | (0.01) |
| Constant | 0.45 | -0.13 | 1.11*** | -0.58*** | -0.40** | 0.47^{***} | -0.67*** | -0.60*** |
| | (0.26) | (0.14) | (0.23) | (0.13) | (0.12) | (0.09) | (0.13) | (0.10) |
| Understanding Controls | X | X | X | X | X | X | X | X |
| Observations \mathbb{D}^2 | 4271 | 4269 | 4276 | 4271 | 4271 | 4276 | 4276 | 4276 |
| Adjusted R^2 | 0.042 | 0.080 | 0.091 | 0.034 | 0.057 | 0.125 | 0.014 | 0.045 |

Table 4: Regressions - Preferences and Individual Characteristics

4.2 Preferences and Life Events

As set out in the identification strategy sub-section, we identify the effect of recent life events by adding dummy variables indicating whether a participant experienced a life event in any of the three years prior to the survey. The coefficients of these dummy variables capture the extent to which the preferences of someone who experienced a life event recently differ from those of someone who experienced the life event earlier. In addition, we show joint effects that identify how the preferences of participants who recently experienced a life event differ from participants who are in the state these individuals were in before experiencing the life event.

4.2.1 Marriage

Table 5 shows the results of (recent) marriage on risk (models 1, 2, and 3), time (models 4, 5, 6), and social preferences (models 7 and 8). The coefficients for the life event dummy variables (i.e., Married in 2019, 2018, and 2017) provide a comparison of those recently married and those married for more than three years. The bottom panel in the table shows p-values of the joint effect of being married and recently married compared to being single.

We first discuss the relationship between being recently married and risk preferences in models (1), (2), and (3). As shown in models (1) and (2), we find that individuals who have been married for more than three years do not differ from single people in their revealed risk preferences. At the same time, they state to be less willing to take risks (p < 0.001) compared to single people, as shown in model (3). Looking at the life event dummy variables and the p-values of the joint effects, we find no evidence that recently married participants differ from those married for more than three years or single people when it comes to their revealed risk preferences. Concerning stated risk preferences, we find that participants married in 2018 and 2019 do not statistically significantly differ from those married for more than three years, but also not from single people. Participants who married in 2017 state to be less willing to take risks compared to singles (p = 0.020), similar to those married for more than three years.¹⁵

The relationship between recent marriage and time preferences is presented in models (4), (5), and (6). We find that individuals who have been married for more than three years behave slightly less patient in the tCTB (p = 0.047) but not in the tMPLs. They also state to be less

¹⁵A possible interpretation of this result is that participants who married in 2018 or 2019 are more similar to singles than to people who have been married for more than three years, while this is no longer the case for those married in 2017. We hesitate to draw any conclusions, however, because the differences between those married in 2018 or 2019 and those married for more than three years (as indicated by the life event dummy variables) are also not statistically significant.

| | Ris | k Prefer | ences | Tin | ne Preferen | ces | Social P | references |
|----------------------------|-------------|----------|---------------|-------------|---------------|--------------|---------------------|---------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| | rCTB | rMPL | GRQ | tCTB | tMPL | GTQ | SG | AQ |
| Marital Status (=Married) | -0.01 | -0.02 | -0.21^{***} | -0.09^{*} | -0.07 | -0.09* | 0.04 | 0.01 |
| | (0.05) | (0.02) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) |
| Marital Status (=Widowed) | -0.30^{*} | 0.04 | -0.16 | 0.13 | 0.03 | 0.17 | 0.02 | -0.17 |
| | (0.12) | (0.10) | (0.15) | (0.17) | (0.12) | (0.15) | (0.18) | (0.13) |
| Marital Status (=Divorced) | 0.10 | -0.00 | 0.07 | -0.05 | -0.05 | 0.08 | 0.01 | -0.04 |
| | (0.07) | (0.04) | (0.06) | (0.07) | (0.06) | (0.06) | (0.07) | (0.06) |
| Married in 2019 | 0.04 | 0.10 | 0.10 | 0.11 | 0.15 | 0.13 | 0.28^{*} | 0.08 |
| | (0.14) | (0.07) | (0.12) | (0.14) | (0.12) | (0.09) | (0.13) | (0.12) |
| Married in 2018 | 0.02 | 0.04 | 0.14 | -0.04 | 0.06 | -0.09 | -0.17 | -0.11 |
| | (0.10) | (0.05) | (0.11) | (0.12) | (0.10) | (0.10) | (0.12) | (0.12) |
| Married in 2017 | 0.04 | 0.01 | -0.02 | 0.20 | 0.09 | 0.02 | 0.06 | -0.13 |
| | (0.11) | (0.05) | (0.10) | (0.11) | (0.10) | (0.10) | (0.12) | (0.11) |
| Constant | 0.44 | -0.15 | 1.07^{***} | -0.60*** | -0.42^{***} | 0.47^{***} | -0.67^{***} | -0.59^{***} |
| | (0.26) | (0.14) | (0.23) | (0.13) | (0.12) | (0.09) | (0.13) | (0.10) |
| Observations | 4271 | 4269 | 4276 | 4271 | 4271 | 4276 | 4276 | 4276 |
| Adjusted R^2 | 0.042 | 0.080 | 0.090 | 0.034 | 0.057 | 0.125 | 0.015 | 0.045 |
| Comparison Recently Ma | rried to | Single | (p-values) | | | | | |
| Joint Effect 2019 | 0.794 | 0.216 | 0.321 | 0.896 | 0.501 | 0.613 | 0.016 | 0.428 |
| Joint Effect 2018 | 0.911 | 0.757 | 0.530 | 0.271 | 0.883 | 0.093 | 0.275 | 0.416 |
| Joint Effect 2017 | 0.748 | 0.812 | 0.020 | 0.292 | 0.879 | 0.562 | 0.389 | 0.305 |

Table 5: Regressions - Marriage and Preferences

Notes: Robust standard errors in parentheses. Regressions additionally control for parenthood, sex, age, age-squared, migration background, occupation status, education, wealth, income, cognitive reflection, financial literacy, and subjective and objective measures of understanding for the experimental tasks. Table A2 in Appendix A reports the full regressions. * p < 0.05, ** p < 0.01, *** p < 0.001

patient in the GTQ (p = 0.044) compared to singles. No effect is found for recent marriage on our time preference measures, nor do recently married participants exhibit significantly different time preferences than single participants.

Models (7) and (8) report the results for the relationship between recent marriage and social preferences. We find that individuals who have been married for more than three years do not differ from singles in terms of the money they sent on average in the SG or their stated altruism in the AQ. However, the results in model (7) suggest that individuals who married most recently (in 2019) sent more to others on average in the SG compared to individuals who married more than three years ago (p = 0.037) and compared to singles (p = 0.016). At the same time, the results in model (8) show that recently married individuals do not differ from those married for more than three years or from singles in their stated altruism.

In sum, we find no effect of recent marriage on risk and time preferences. There is suggestive evidence that individuals who married most recently exhibit more pro-social preferences compared to singles and those who married for a longer time as they transferred more to others on average in the SG, although no difference is found for stated altruism.

4.2.2 Divorce

Table 6 shows the regression results of (recent) divorce on risk (models 1, 2, and 3), time (models 4, 5, 6), and social preferences (models 7 and 8). The coefficients for the life event dummy variables (i.e., Divorced in 2019, 2018, and 2017) provide a comparison of those recently divorced and those divorced for more than three years. The bottom panel in the table shows p-values of the joint effect of being divorced and recently divorced relative to being married.¹⁶

Concerning risk preferences, we find that individuals who divorced more than three years ago do not differ from singles in their risk preferences across all measures. Looking at the most recently divorced (in 2019), however, we find evidence in models (1) and (2) that they take less risk in the rMPLs and rCTB compared to those who have been divorced for more than three years (p = 0.073 and p = 0.001, respectively) and compared to married individuals in the case of rMPLs (p = 0.003). A weaker effect in the same direction is found for people who divorced in 2018. We do not find any effects for stated risk preferences in model (3).

Models (4), (5), and (6) report the relationship between divorce and time preferences. We find that individuals who are divorced for more than three years do not differ from singles in terms of their revealed and stated time preferences. Looking at the life event dummy variables in models (4) and (5), we also find no differences in revealed time preferences for those who recently divorced. In Model (6), we do find some evidence that individuals who divorced most recently (in 2019) state to be more patient than those divorced for more than three years (p = 0.029) and married people (p = 0.001). We find a similar, but weaker, effect for those divorced in 2018 compared to married people (p = 0.042).

The relationship between divorce and social preferences is presented in models (7) and (8). We do not find any significant difference between divorced and single individuals, nor do we find any effect of a recent divorce compared to people who have been divorced for more than three years. Comparing recently divorced participants to married participants also does not reveal a significant effect of divorce on social preferences.

In sum, we find that individuals who divorced recently, especially in the last year before the study, take fewer risks in our revealed preference measures compared to married individuals and those that are divorced for more than three years. Individuals who divorced in the last

¹⁶We report the joint effects with "married" as a reference group because getting divorced implies changing the marital status from married to divorced.

| | Ris | sk Prefere | ences | Tim | e Preferei | nces | Social Pi | references |
|----------------------------|-------------|---------------|--------------|---------------|-----------------|--------------|---------------------|------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| | rCTB | rMPL | GRQ | tCTB | tMPL | GTQ | SG | AQ |
| Marital Status (=Divorced) | 0.14 | 0.04 | 0.10 | -0.04 | -0.02 | 0.06 | -0.01 | -0.03 |
| | (0.08) | (0.04) | (0.07) | (0.07) | (0.06) | (0.07) | (0.07) | (0.07) |
| Marital Status (=Married) | -0.00 | -0.01 | -0.20*** | -0.07 | -0.05 | -0.08^{*} | 0.05 | 0.00 |
| | (0.04) | (0.02) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) |
| Marital Status (=Widowed) | -0.29^{*} | 0.05 | -0.15 | 0.15 | 0.05 | 0.18 | 0.02 | -0.18 |
| | (0.12) | (0.10) | (0.15) | (0.17) | (0.12) | (0.15) | (0.18) | (0.13) |
| Divorced in 2019 | -0.30 | -0.35^{***} | 0.05 | 0.04 | -0.25 | 0.31^{*} | 0.23 | -0.07 |
| | (0.17) | (0.10) | (0.21) | (0.20) | (0.17) | (0.14) | (0.19) | (0.24) |
| Divorced in 2018 | -0.14 | -0.23^{*} | -0.22 | 0.04 | -0.19 | 0.25 | -0.03 | -0.04 |
| | (0.18) | (0.11) | (0.21) | (0.19) | (0.22) | (0.20) | (0.23) | (0.25) |
| Divorced in 2017 | -0.12 | -0.00 | -0.14 | -0.13 | 0.01 | -0.10 | 0.10 | -0.10 |
| | (0.22) | (0.09) | (0.21) | (0.23) | (0.18) | (0.19) | (0.21) | (0.23) |
| Constant | 0.44 | -0.15 | 1.10^{***} | -0.58^{***} | -0.40^{**} | 0.47^{***} | -0.67^{***} | -0.60*** |
| | (0.26) | (0.14) | (0.23) | (0.13) | (0.12) | (0.09) | (0.13) | (0.10) |
| Observations | 4271 | 4269 | 4276 | 4271 | 4271 | 4276 | 4276 | 4276 |
| Adjusted R^2 | 0.042 | 0.082 | 0.090 | 0.034 | 0.057 | 0.125 | 0.014 | 0.045 |
| Comparison Recently Div | orced to | o Married | l (p-value | s) | | | | |
| Joint Effect 2019 | 0.318 | 0.003 | 0.089 | 0.686 | 0.199 | 0.001 | 0.351 | 0.647 |
| Joint Effect 2018 | 0.982 | 0.094 | 0.718 | 0.687 | 0.473 | 0.042 | 0.668 | 0.758 |
| Joint Effect 2017 | 0.911 | 0.603 | 0.451 | 0.658 | 0.775 | 0.822 | 0.848 | 0.554 |

Table 6: Regressions - Divorce and Preferences

Notes: Robust standard errors in parentheses. Regressions additionally control for parenthood, sex, age, age-squared, migration background, occupation status, education, wealth, income, cognitive reflection, financial literacy, and subjective and objective measures of understanding for the experimental tasks. Table A3 in Appendix A reports the full regressions. * p < 0.05, ** p < 0.01, *** p < 0.001

year before the study also state to be slightly more patient, although they do not differ in their revealed patience. We find no robust effects of being recently divorced on social preferences.

4.2.3 First Parenthood

Table 7 shows the results of recently becoming a parent for the first time on risk (models 1, 2, and 3), time (models 4, 5, 6), and social preferences (models 7 and 8). The coefficients for the life event dummy variables (i.e., First Parenthood in 2019, 2018, and 2017) provide a comparison of those who experienced first parenthood recently compared to those who experienced first parenthood more than three years ago. The bottom panel in the table shows p-values of the joint effect of being a parent and recently experiencing parenthood compared to not having children.

We first discuss the relationship between being first parenthood and risk preferences in models (1), (2), and (3). As shown in models (1) and (2), we find that participants who became parents more than three years ago do not differ from individuals without children in their revealed risk

| | \mathbf{Risl} | k Prefer | ences | Tin | ne Preferen | .ces | Social Pi | eferences |
|--------------------------|-----------------|-------------|----------------|----------|-----------------|--------------|---------------|-----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| | rCTB | rMPL | \mathbf{GRQ} | tCTB | tMPL | GTQ | \mathbf{SG} | AQ |
| Parenthood $(=$ Yes $)$ | 0.04 | 0.02 | 0.14^{**} | -0.03 | -0.03 | 0.03 | -0.02 | -0.03 |
| | (0.04) | (0.02) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) |
| First Parenthood in 2019 | 0.11 | 0.17^{**} | 0.04 | 0.20 | 0.15 | 0.18 | -0.17 | -0.01 |
| | (0.13) | (0.06) | (0.12) | (0.13) | (0.12) | (0.10) | (0.12) | (0.12) |
| First Parenthood in 2018 | 0.12 | 0.05 | 0.04 | 0.12 | 0.10 | 0.03 | -0.22 | 0.05 |
| | (0.12) | (0.06) | (0.12) | (0.14) | (0.12) | (0.13) | (0.13) | (0.14) |
| First Parenthood in 2017 | 0.26 | 0.07 | 0.26 | 0.12 | -0.04 | -0.20 | 0.11 | -0.09 |
| | (0.18) | (0.06) | (0.14) | (0.13) | (0.11) | (0.15) | (0.15) | (0.16) |
| Constant | 0.39 | -0.18 | 1.07^{***} | -0.61*** | -0.41*** | 0.46^{***} | -0.64^{***} | -0.60*** |
| | (0.26) | (0.14) | (0.23) | (0.13) | (0.13) | (0.09) | (0.13) | (0.10) |
| Observations | 4271 | 4269 | 4276 | 4271 | 4271 | 4276 | 4276 | 4276 |
| Adjusted \mathbb{R}^2 | 0.042 | 0.081 | 0.091 | 0.034 | 0.057 | 0.125 | 0.015 | 0.045 |
| Comparison Recent Fin | rst Pare | nthood | to Havin | g No Chi | ldren (p-v | values) | | |
| Joint Effect 2019 | 0.244 | 0.001 | 0.146 | 0.168 | 0.303 | 0.033 | 0.097 | 0.762 |
| Joint Effect 2018 | 0.176 | 0.237 | 0.152 | 0.526 | 0.597 | 0.627 | 0.059 | 0.887 |
| Joint Effect 2017 | 0.100 | 0.127 | 0.005 | 0.488 | 0.533 | 0.268 | 0.552 | 0.479 |

Table 7: Regressions - First Parenthood and Preferences

Notes: Robust standard errors in parentheses. Regressions additionally control for marital status, sex, age, age-squared, migration background, occupation status, education, wealth, income, cognitive reflection, financial literacy, and subjective and objective measures of understanding for the experimental tasks. Table A4 in Appendix A reports the full regressions. * p < 0.05, ** p < 0.01, *** p < 0.001

preferences. At the same time, they state to be more willing to take risks as shown in model (3) (p = 0.001). Looking at the life event dummy variables, we find that those who experienced first parenthood most recently (in 2019) take more risks in the rMPLs than participants who have been parents for more than three years (p = 0.004) and than participants without children (p = 0.001). We do not find the effect for those experiencing first parenthood in 2018 or 2017. Moreover, we find no effects of recently becoming a parent for the rCTB or stated preferences measured with the GRQ, except that those who experienced first parenthood in 2017 stated to be more willing to take more risks compared to individuals who do not have children (p = 0.005).

The relationship between parenthood and time preferences is presented in models (4), (5), and (6). We find that participants with children for longer than three years do not differ from those who do not have children in terms of their revealed and stated time preferences. We do find that participants who most recently became parents (in 2019) state to be more patient than participants without children (p = 0.033). No differences are found for revealed time preferences.

Models (7) and (8) report the results for the relationship between recent first parenthood and social preferences. We find that individuals who became parents more than three years ago do not differ from singles in terms of the money they sent in the SG or in terms of their stated altruism in the AQ. We also find no differences for participants who recently became parents.

In sum, we find that those who experienced first parenthood most recently (in 2019) take slightly more risks in the rMPLs and state to be slightly more patient in the GTQ. We find no effects of recent parenthood on social preferences.

5 Discussion and Conclusion

Given that life events can affect people's personality (Bühler et al., 2023) and that preferences have been found to change in response to external events (see Chuang and Schechter, 2015 and Umer, 2023) it seems plausible that preferences might be affected by life events that people experience. Indeed earlier studies found that people may become more risk averse after marriage or becoming a parent (Hanewald and Kluge, 2014, Browne et al., 2016, Kettlewell, 2019, and Görlitz and Tamm, 2020). In this study, we extend this to include time and social preferences in addition to risk preferences. Furthermore, we elicit preferences not only via self-reports but also with incentivized tasks.

Our results indicate that the relation between our preference measures and demographic and socioeconomic characteristics of individuals is largely in line with results reported in previous studies, although especially for time and social preferences we find some associations that go against earlier findings. When it comes to the effect of recently experiencing a life event in the form of marriage, divorce, or first parenthood, we find that it has some short-run impact on our risk, time, and social preferences measures. Concerning recent marriage, we find suggestive evidence that most recently married individuals behave more pro-social, but we find no effect on risk and time preferences. Divorce is associated with less risk-taking in our revealed preference measures, in particular for those most recently (in 2019) divorced. In addition, we find evidence that most recently divorced individuals assess themselves as more patient and that there is no effect on social preferences. Recent parenthood is associated with more risk-taking in one of our incentivized experimental measures, but not the other. In contrast to previous literature, we do not find an effect on stated risk preferences. In addition, we find evidence that individuals who experienced recent parenthood assess themselves as more patient and find no effect on social preferences. The suggestion drawn from the literature on personality, that divorce might have more substantial effects than marriage or parenthood (Bühler et al., 2023), is not confirmed as we find some effects for each of these three life events.

Interestingly, all of the effects we observe concern either stated or revealed preferences, but

generally not both. Specifically, we find that individuals who recently married display more pro-social behavior, but do not differ in their stated altruism. Individuals who divorced most recently take less risk in both of our incentivized measures but do not differ in their stated risk aversion. In addition, recently divorced participants state to be less patient and, while they also behave slightly less patiently in the incentivized experimental tasks, the results are not statistically significant. First parenthood is associated with more risk-taking in our incentivized experimental tasks, but no difference is found for stated risk aversion. In addition, individuals who recently experienced first parenthood state to be more patient, and while they also behave slightly more patient in the incentivized experimental tasks, the results are not statistically significant. This potential discrepancy indicates that the difference between stated and revealed risk preferences needs to be explored more carefully.

In our study, we have to rely on cross-sectional data and consequently can only account for individual heterogeneity to a limited extent. A more effective way to control for heterogeneity would be to follow individuals over a longer period while repeatedly eliciting preferences, as is being done by several studies using only stated preferences. However, to the best of our knowledge, no study to this date has elicited data on revealed preferences repeatedly over an extended period of time for a large and heterogeneous population sample. Our diverging results for stated and revealed preferences indicate that it would be important to repeatedly elicit both hypothetical and incentivized preference measures over a longer period, while at the same time tracking changes in the personal circumstances of individuals.

More generally, the relatively low number of observations of individuals in our data set who experience specific life events means that we cannot precisely estimate the size of the effects and prevent existing effects from being statistically significant in our analysis. We might thus underestimate the impact of life events. Nevertheless, the diverging results for revealed and stated preferences suggest that perceived preferences and people's behavior when experimentally eliciting preferences potentially respond differently to life events. Consequently, the inference regarding whether and how life events shift preferences may differ between observing the actual behavior of individuals and asking them to subjectively assess their own preferences.

As to the practical implications of our study, we note that, given that we find that divorce and first parenthood may affect risk and time preferences for those who experienced the life event most recently, these life events might be important to consider for financial institutions who give advice or invest on the behalf of clients. In such cases, financial institutions should be aware of when such preferences are measured and that certain life events may temporarily shift preferences.

So far, the evidence on the impact of personal life events on people's risk, time, and social preferences is fragmented, and the results are mixed. It is important to note that relevant life events are not limited to those that we study in this paper. There are many such events for which we had no or insufficient data, but which could have equal or even bigger impact: for example, the death of a child or spouse, a serious illness, or a major career change. As we find in our sample that the effects of life events on preferences vary substantially depending on the specific event and the measure that we use, we cannot simply generalize our findings to other life events that might also change preferences. Assessment of the relevance of a broad range of personal life events on risk, time, and social preferences requires further systematic research.

References

- Almas, I., Cappelen, A. W., and Tungodden, B. (2020). Cutthroat capitalism versus cuddly socialism: Are americans more meritocratic and efficiency-seeking than scandinavians? *Journal* of Political Economy, 128(5):1753–1788.
- Andersen, S., Di Girolamo, A., Harrison, G. W., and Lau, M. I. (2014). Risk and time preferences of entrepreneurs: evidence from a Danish field experiment. *Theory and Decision*, 77(3):341– 357.
- Andreoni, J. and Sprenger, C. (2012). Estimating time preferences from convex budgets. American Economic Review, 102(7):3333–56.
- Beauchamp, J. P., Cesarini, D., and Johannesson, M. (2017). The psychometric and empirical properties of measures of risk preferences. *Journal of Risk and Uncertainty*, 54(3):203–237.
- Becker, G. S. (1978). The Economic Approach to Human Behavior. University of Chicago Press.
- Bernardi, L., Huinink, J., and Settersten, R. A. (2019). The life course cube: A tool for studying lives. Advances in Life Course Research, 41:100258.
- Bertocchi, G., Brunetti, M., and Torricelli, C. (2011). Marriage and other risky assets: A portfolio approach. *Journal of Banking & Finance*, 35(11):2902–2915.
- Bokern, P., Linde, J., Riedl, A., Schmeets, H., and Werner, P. (2022). Personal life events and individual risk preferences. *Netspar Design Paper*, 210.
- Bokern, P., Linde, J., Riedl, A., Schmeets, H., and Werner, P. (2023). The Convergent and External Validity of Risk Preference Elicitation Methods: Controlling for Measurement Error in a Large Population Sample. *Netspar Academic Series*, DP 08/2023-038.
- Browne, M. J., Jaeger, V., Richter, A., and Steinorth, P. (2016). *Familiy Transitions and Risk Attitude* (MRIC Working Paper No. 32).
- Bühler, J. L., Orth, U., Bleidorn, W., Weber, E., Kretzschmar, A., Scheling, L., and Hopwood,C. J. (2023). Life Events and Personality Change: A Systematic Review and Meta-Analysis.European Journal of Personality.
- Chan, H. F., Skali, A., Savage, D. A., Stadelmann, D., and Torgler, B. (2020). Risk attitudes and human mobility during the COVID-19 pandemic. *Scientific Reports* 10, 19931.
- Christiansen, C., Joensen, J. S., and Rangvid, J. (2015). Understanding the effects of marriage and divorce on financial investments: The role of background risk sharing. *Economic Inquiry*, 53(1):431–447.
- Chuang, Y. and Schechter, L. (2015). Stability of experimental and survey measures of risk, time,

and social preferences: A review and some new results. *Journal of Development Economics*, 117:151–170.

- Coller, M. and Williams, M. B. (1999). Eliciting individual discount rates. Experimental Economics, 2(2):107–127.
- Croson, R. and Gneezy, U. (2009). Gender Differences in Preferences. Journal of Economic Literature, 47(2):448–74.
- Dohmen, T., Falk, A., Huffman, D., Sunde, U., Schupp, J., and Wagner, G. G. (2011). Individual risk attitudes: Measurement, determinants, and behavioral consequences. *Journal of the European Economic Association*, 9(3):522–550.
- Donkers, B., Melenberg, B., and Soest, A. V. (2001). Estimating risk attitudes using lotteries: A large sample approach. *Journal of Risk and Uncertainty*, 22(2):165–195.
- Epper, T., Fehr, E., Fehr-Duda, H., Kreiner, C. T., Lassen, D. D., Leth-Petersen, S., and Rasmussen, G. N. (2020). Time Discounting and Wealth Inequality. *American Economic Review*, 110(4):1177–1205.
- Falk, A., Becker, A., Dohmen, T., Enke, B., Huffman, D., and Sunde, U. (2018). Global evidence on economic preferences. *The Quarterly Journal of Economics*, 133(4):1645–1692.
- Falk, A., Becker, A., Dohmen, T., Huffman, D., and Sunde, U. (2016, 2022). The Preference Survey Module: A Validated Instrument for Measuring Risk, Time, and Social Preferences. *Management Science*, Articles in Advance:1–16.
- Frederick, S. (2005). Cognitive reflection and decision making. *Journal of Economic Perspectives*, 19(4):25–42.
- Görlitz, K. and Tamm, M. (2020). Parenthood, risk attitudes and risky behavior. Journal of Economic Psychology, 79:102189.
- Hanewald, K. and Kluge, F. (2014). The Impact of Family Structure on Risk Attitudes and Financial Decisions during the Financial Crisis (ARC Centre of Excellence in Population Ageing Research (CEPAR) Working Paper 2014/03).
- Holt, C. A. and Laury, S. K. (2002). Risk aversion and incentive effects. *The American Economic Review*, 92(5):1644–1655.
- Kettlewell, N. (2019). Risk preference dynamics around life events. Journal of Economic Behavior & Organization, 162:66–84.
- Love, D. A. (2009). The effects of marital status and children on savings and portfolio choice. *Review of Financial Studies*, 23(1):385–432.
- Lusardi, A. and Mitchell, O. S. (2014). The economic importance of financial literacy: Theory

and evidence. Journal of Economic Literature, 52(1):5-44.

- Martorano, B., Handa, S., Halpern, C., Pettifor, A., and Thirumurthy, H. (2015). Age and Gender Effects on Time Discounting in a Large Scale Cash Transfer Programme (Institute of Development Studies Working Paper No. 463).
- Mellis, A. M., Athamneh, L. N., Stein, J. S., Sze, Y. Y., Epstein, L. H., and Bickel, W. K. (2018). Less is more: Negative income shock increases immediate preference in cross commodity discounting and food demand. *Appetite*, 129:155–161.
- Menkhoff, L. and Sakha, S. (2017). Estimating risky behavior with multiple-item risk measures. Journal of Economic Psychology, 59(C):59–86.
- Perez-Arce, F. (2017). The effect of education on time preferences. *Economics of Education Review*, 56:52–64.
- Potters, J., Riedl, A., and Smeets, P. (2016). Towards a practical and scientifically sound tool for measuring time and risk preferences in pension savings decisions. *Netspar Design Paper*, 59.
- Riedl, A., Schmeets, H., and Werner, P. (2019). Preferences for Solidarity and Attitudes Towards the Dutch Pension System: Evidence from a Representative Sample. *Netspar Design Paper*, 128.
- Selten, R. (1967). Die Strategiemethode zur Erforschung des eingeschränkt rationalen Verhaltens im Rahmen eines Oligopolexperiments. Beiträge zur experimentellen Wirtschaftsforschung. Tübingen: JCB Mohr, pages 136–168.
- Selten, R. and Ockenfels, A. (1998). An experimental solidarity game. Journal of Economic Behavior and Organization, 34(4):517–539.
- Sparrow, E. P., Swirsky, L. T., Kudus, F., and Spaniol, J. (2021). Aging and altruism: A meta-analysis. *Psychology and Aging*, 36(1):49–56.
- Stigler, G. J. and Becker, G. S. (1977). De gustibus non est disputandum. The American Economic Review, 67(2):76–90.
- Sutter, M., Kocher, M. G., Glätzle-Rützler, D., and Trautmann, S. T. (2013). Impatience and Uncertainty: Experimental Decisions Predict Adolescents' Field Behavior. American Economic Review, 103(1):510–531.
- Tawiah, B. B. (2022). Does education have an impact on patience and risk willingness? Applied Economics, 54(58):6687–6702.
- Umer, H. (2023). A selected literature review of the effect of covid-19 on preferences. Journal of the Economic Science Association.

- Vollhardt, J. R. (2009). Altruism Born of Suffering and Prosocial Behavior Following Adverse Life Events: A Review and Conceptualization. Social Justice Research, 22(1):53–97.
- von Gaudecker, H.-M., van Soest, A., and WengstrÖm, E. (2011). Heterogeneity in risky choice behavior in a broad population. *American Economic Review*, 101(2):664–694.
- Zetterdahl, E. (2015). *Scenes from a Marriage: Divorce and Financial Behavior* (Umeå economic studies No. 907).

Appendix A Full Regressions

| | | k Prefere | | | ne Prefere | | Social P | |
|------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|----------------------------------|-------------------------|----------------------------------|-----------------------|
| | rCTB | rMPL | GRQ | tCTB | tMPL | GTQ | SG | AQ |
| Marital Status (=Married) | -0.00 | -0.01 | -0.20*** | -0.07 | -0.05 | -0.08* | 0.05 | 0.00 |
| Marital Status (=Widowed) | (0.04) | (0.02) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04 |
| Maritar Status (= Widowed) | -0.30* (0.12) | 0.05 (0.10) | -0.15 (0.15) | (0.15) (0.17) | (0.05) (0.12) | 0.18 (0.15) | 0.02 (0.18) | -0.18 (0.13 |
| Marital Status (=Divorced) | 0.11 | 0.00 | 0.08 | -0.04 | -0.04 | 0.09 | 0.01 | -0.04 |
| | (0.07) | (0.03) | (0.06) | (0.07) | (0.06) | (0.06) | (0.06) | (0.06 |
| Parenthood (=Yes) | 0.06 | 0.04 | 0.15^{***} | -0.01 | -0.02 | 0.04 | -0.04 | -0.03 |
| | (0.04) | (0.02) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04 |
| Sex (=Female) | -0.22*** (0.03) | -0.12*** (0.02) | -0.34*** (0.03) | 0.06 (0.03) | 0.05 (0.03) | -0.12*** (0.03) | (0.04) (0.03) | 0.29** (0.03 |
| Age | -0.02 | -0.02** | -0.05*** | 0.00 | -0.00 | -0.02*** | 0.01*** | 0.01** |
| 0 | (0.01) | (0.01) | (0.01) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00 |
| Age Squared | 0.00 | 0.00^{**} | 0.00^{***} | | | | | |
| | (0.00) | (0.00) | (0.00) | 0.01*** | 0.11** | 0.00 | 0.00 | 0.00 |
| Migration Background (=Native) | 0.03 (0.04) | (0.01) (0.02) | 0.03 (0.04) | 0.21^{***} | 0.11** | -0.02 (0.05) | 0.03 | -0.09 (0.05 |
| Occupation Status (=Self-Employed) | 0.04) | 0.04* | 0.35*** | (0.05) - 0.09^{**} | (0.04) - 0.07^* | 0.18*** | (0.04) 0.07 | 0.04 |
| eccupation status (-sen Employed) | (0.04) | (0.02) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03 |
| Occupation Status (=Other) | -0.01 | -0.01 | 0.13^{*} | -0.14* | -0.05 | 0.08 | 0.02 | 0.02 |
| | (0.06) | (0.03) | (0.06) | (0.06) | (0.05) | (0.06) | (0.06) | (0.06) |
| Education Level (=Low) | 0.04 | -0.05 | 0.02 | -0.00 | 0.03 | -0.07 | -0.03 | -0.28 |
| Education Level (=High) | (0.08) 0.04 | (0.04) 0.02 | (0.07) -0.02 | (0.08) 0.08^{*} | (0.07) 0.18^{***} | (0.08) 0.14^{***} | (0.09) 0.05 | (0.09) 0.17^* |
| Education Level (-High) | (0.04) | (0.02) | -0.02 (0.04) | (0.08) | (0.18) | (0.04) | (0.03) | (0.04 |
| Education Level (=Unknown) | 0.06 | 0.00 | 0.01 | -0.02 | 0.05 | -0.01 | 0.06 | 0.00 |
| | (0.05) | (0.02) | (0.04) | (0.05) | (0.04) | (0.04) | (0.04) | (0.05) |
| Household Wealth (Quintile=2) | 0.09 | 0.03 | -0.07 | 0.09 | 0.14^{**} | 0.08 | 0.05 | -0.0 |
| | (0.05) | (0.03) | (0.05) | (0.05) | (0.04) | (0.05) | (0.05) | (0.05 |
| Household Wealth (Quintile=3) | 0.06 | -0.05 | -0.10* | 0.05 | 0.13^{**} | 0.06 | -0.07 | -0.0 |
| Household Wealth (Quintile=4) | (0.05) 0.06 | (0.03) -0.03 | (0.05) -0.20*** | (0.05) 0.07 | (0.04) 0.24^{***} | (0.05) 0.10 | (0.05) -0.06 | (0.05 -0.03 |
| | (0.05) | (0.03) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05 |
| Household Wealth (Quintile=5) | 0.05 | -0.01 | -0.06 | 0.10 | 0.31*** | 0.25^{***} | -0.11 | -0.0 |
| | (0.06) | (0.03) | (0.06) | (0.06) | (0.05) | (0.06) | (0.06) | (0.06 |
| Household Income (Quintile=2) | 0.00 | 0.01 | 0.03 | 0.07 | -0.02 | -0.03 | 0.05 | -0.0 |
| Household Income (Quintile=3) | (0.05) 0.02 | (0.03) 0.03 | (0.05) 0.08 | (0.05) 0.01 | (0.04) -0.03 | (0.05) 0.01 | (0.05) 0.07 | (0.05 0.01 |
| Household Income (Quintile=3) | (0.02) | (0.03) | (0.05) | (0.05) | (0.04) | (0.05) | (0.07) | (0.05 |
| Household Income (Quintile=4) | 0.09 | 0.07^{**} | 0.19^{***} | 0.11^{*} | -0.04 | 0.02 | 0.06 | 0.07 |
| | (0.05) | (0.03) | (0.05) | (0.05) | (0.04) | (0.05) | (0.05) | (0.05) |
| Household Income (Quintile=5) | 0.13* | 0.12*** | 0.23*** | 0.08 | -0.10* | 0.03 | 0.06 | 0.17^{*} |
| Committion Dofferation | (0.05) | (0.03) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05 |
| Cognitive Reflection | (0.01) (0.02) | 0.03^{***} (0.01) | -0.07*** (0.01) | 0.09^{***} (0.01) | 0.09^{***} (0.01) | 0.07^{***} (0.01) | -0.00 (0.01) | 0.03 (0.01 |
| Financial Literacy | 0.02 | 0.02* | 0.08*** | 0.02 | 0.02 | 0.10*** | -0.02 | 0.02 |
| | (0.02) | (0.01) | (0.01) | (0.02) | (0.01) | (0.01) | (0.01) | (0.01 |
| CTB Instructions Grade | 0.01 | | | 0.03^{*} | | | | |
| ~ ~ ~ ~ ~ | (0.01) | | | (0.01) | | | | |
| CTB Confidence Grade | -0.07*** | | | -0.01 | | | | |
| CTB Dominated Choice | (0.01) 0.42^{***} | | | (0.01) - 0.16^{**} | | | | |
| CTD Dominated Choice | (0.05) | | | (0.06) | | | | |
| MPL Risk Instructions Grade | (0.00) | -0.01^{*} | | (0.00) | | | | |
| | | (0.01) | | | | | | |
| MPL Risk Confidence Grade | | -0.01* | | | | | | |
| MPL Risk Inconsistent Switching | | (0.01) 0.20*** | | | | | | |
| MPL Risk Dominated Choice | | (0.02) -0.43*** | | | | | | |
| MPL Time Instructions Grade | | (0.04) | | | -0.01 | | | |
| MPL Time Confidence Grade | | | | | (0.01) 0.07^{***} (0.01) | | | |
| MPL Time Inconsistent Switching | | | | | (0.01) 0.15^{**} (0.05) | | | |
| SG Instructions Grade | | | | | (0.05) | | -0.01 (0.01) | |
| SG Confidence Grade | | | | | | | (0.01) 0.04^{***} (0.01) | |
| Constant | 0.45 (0.26) | -0.13 (0.14) | 1.11**** (0.23) | -0.58*** (0.13) | -0.40** (0.12) | 0.47^{***} (0.09) | (0.01) -0.67*** (0.13) | -0.60^{*} (0.10 |
| Observations Adjusted R^2 | (0.26) 4271 0.042 | (0.14) 4269 0.080 | (0.23) 4276 0.091 | (0.13) 4271 0.034 | (0.12) 4271 0.057 | (0.09) 4276 0.125 | (0.13) 4276 0.014 | (0.10 4270 0.04 |

Table A1: Full Regressions - Preferences and Individual Characteristics

| | | k Prefere | nces | | me Preferen | nces | Social Preferences | | |
|---|------------------------|-------------------------|--------------------------|-------------------------|----------------------------------|--------------------------|------------------------|------------------------|--|
| | rCTB | rMPL | \mathbf{GRQ} | tCTB | tMPL | \mathbf{GTQ} | SG | AQ | |
| Married in 2019 | 0.04 | 0.10 | 0.10 | 0.11 | 0.15 | 0.13 | 0.28^{*} | 0.08 | |
| | (0.14) | (0.07) | (0.12) | (0.14) | (0.12) | (0.09) | (0.13) | (0.12) | |
| Married in 2018 | 0.02 | 0.04 | 0.14 | -0.04 | 0.06 | -0.09 | -0.17 | -0.11 | |
| Married in 2017 | (0.10) 0.04 | (0.05) 0.01 | (0.11) -0.02 | (0.12) 0.20 | (0.10) 0.09 | (0.10) 0.02 | (0.12) 0.06 | (0.12) -0.13 | |
| Married in 2017 | (0.11) | (0.01) | (0.10) | (0.11) | (0.10) | (0.10) | (0.12) | (0.11) | |
| Marital Status (=Married) | -0.01 | -0.02 | -0.21*** | -0.09* | -0.07 | -0.09* | 0.04 | 0.01 | |
| | (0.05) | (0.02) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) | |
| Marital Status (=Widowed) | -0.30* | 0.04 | -0.16 | 0.13 | 0.03 | 0.17 | 0.02 | -0.17 | |
| Marital Status (=Divorced) | (0.12) 0.10 | (0.10) -0.00 | (0.15) 0.07 | (0.17) -0.05 | (0.12) -0.05 | (0.15) 0.08 | (0.18) 0.01 | (0.13) -0.04 | |
| Maritai Status (=Divolced) | (0.07) | (0.04) | (0.06) | (0.07) | (0.06) | (0.06) | (0.07) | (0.04) | |
| Parenthood (=Yes) | 0.06 | 0.04 | 0.15*** | -0.01 | -0.02 | 0.04 | -0.03 | -0.03 | |
| | (0.04) | (0.02) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) | |
| Sex (=Female) | -0.22*** | -0.11*** | -0.34*** | 0.06 | 0.05 | -0.12*** | 0.04 | 0.29** | |
| Age | (0.03) -0.02 | (0.02) - 0.02^{**} | (0.03) - 0.05^{***} | (0.03) 0.00 | (0.03) -0.00 | (0.03) - 0.02^{***} | (0.03) 0.01^{***} | (0.03) 0.01^{**} | |
| Age | (0.01) | (0.01) | (0.01) | (0.00) | (0.00) | (0.00) | (0.00) | (0.01) | |
| Age Squared | 0.00 | 0.00* | 0.00*** | (0100) | (0.00) | (0.00) | (0.00) | (0.00) | |
| | (0.00) | (0.00) | (0.00) | | | | | | |
| Migration Background (=Native) | 0.03 | 0.01 | 0.04 | 0.21^{***} | 0.11** | -0.02 | 0.02 | -0.09 | |
| Occurrentian Stature (Salf Franciscus) | (0.04) | (0.02) | (0.04) | (0.05) | (0.04) | (0.05) | (0.04) | (0.05) | |
| Occupation Status (=Self-Employed) | 0.08^{*} (0.04) | 0.04^{*} (0.02) | 0.35^{***} (0.03) | -0.09^{**} (0.03) | -0.07^{*} (0.03) | 0.18^{***} (0.03) | 0.07 (0.03) | 0.04 (0.03) | |
| Occupation Status (=Other) | -0.01 | -0.01 | (0.03) 0.13^* | -0.14^* | -0.05 | 0.08 | 0.02 | 0.02 | |
| | (0.06) | (0.03) | (0.06) | (0.06) | (0.05) | (0.06) | (0.06) | (0.06) | |
| Education Level (=Low) | 0.04 | -0.05 | 0.01 | -0.00 | 0.03 | -0.07 | -0.03 | -0.28* | |
| | (0.08) | (0.04) | (0.07) | (0.08) | (0.07) | (0.08) | (0.09) | (0.09) | |
| Education Level (=High) | 0.04 | 0.02 | -0.02 | 0.08^{*} | 0.18^{***} | 0.14*** | 0.05 | 0.16** | |
| Education Level (=Unknown) | (0.04) 0.06 | (0.02) 0.00 | (0.04) 0.01 | (0.04) -0.02 | (0.03) 0.05 | (0.04) -0.01 | (0.04) 0.06 | (0.04) 0.00 | |
| (| (0.05) | (0.02) | (0.04) | (0.05) | (0.04) | (0.04) | (0.04) | (0.05) | |
| Household Wealth (Quintile=2) | 0.09 | 0.03 | -0.07 | 0.09 | 0.14^{**} | 0.08 | 0.05 | -0.05 | |
| | (0.05) | (0.03) | (0.05) | (0.05) | (0.04) | (0.05) | (0.05) | (0.05) | |
| Household Wealth (Quintile=3) | 0.07 | -0.05 | -0.10* | 0.05 | 0.14** | 0.06 | -0.07 | -0.06 | |
| Household Wealth (Quintile=4) | (0.05) 0.06 | (0.03) -0.02 | (0.05) -0.20*** | (0.05) 0.08 | (0.04) 0.24^{***} | (0.05) 0.10 | (0.05) -0.06 | (0.05) -0.03 | |
| ilouseneid (venien (quintine_1) | (0.05) | (0.03) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | |
| Household Wealth (Quintile=5) | 0.06 | -0.01 | -0.06 | 0.10 | 0.31^{***} | 0.25^{***} | -0.10 | -0.07 | |
| | (0.06) | (0.03) | (0.06) | (0.06) | (0.05) | (0.06) | (0.06) | (0.06) | |
| Household Income (Quintile=2) | 0.00 | 0.02 | 0.03 | 0.07 | -0.02 | -0.03 | 0.05 | -0.09 | |
| Household Income (Quintile=3) | (0.05) 0.02 | (0.03) 0.03 | (0.05) 0.08 | (0.05) 0.01 | (0.04) -0.03 | (0.05) 0.01 | (0.05) 0.07 | (0.05) 0.01 | |
| nousenoid meome (Quintile=3) | (0.02) | (0.03) | (0.05) | (0.01) | (0.04) | (0.05) | (0.05) | (0.01) | |
| Household Income (Quintile=4) | 0.09 | 0.08** | 0.19^{***} | 0.11^{*} | -0.04 | 0.02 | 0.06 | 0.07 | |
| <u> </u> | (0.05) | (0.03) | (0.05) | (0.05) | (0.04) | (0.05) | (0.05) | (0.05) | |
| Household Income (Quintile=5) | 0.13* | 0.12*** | 0.23*** | 0.08 | -0.10* | 0.02 | 0.05 | 0.17** | |
| Comition Doffertion | (0.05) | (0.03) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | |
| Cognitive Reflection | (0.01) (0.02) | 0.03^{***} (0.01) | -0.07*** (0.01) | 0.09^{***} (0.01) | 0.09^{***} (0.01) | 0.07^{***} (0.01) | -0.00 (0.01) | (0.03^{*}) (0.01) | |
| Financial Literacy | 0.02 | 0.02^* | 0.08*** | 0.02 | 0.02 | 0.10*** | -0.02 | 0.02 | |
| | (0.02) | (0.01) | (0.01) | (0.02) | (0.01) | (0.01) | (0.01) | (0.01) | |
| CTB Instructions Grade | 0.01 | . , | . , | 0.03* | . , | . , | . , | . , | |
| ~ | (0.01) | | | (0.01) | | | | | |
| CTB Confidence Grade | -0.07*** | | | -0.01 | | | | | |
| CTB Dominated Choice | (0.01) 0.42^{***} | | | (0.01) - 0.16^{**} | | | | | |
| OTB Dominated Choice | (0.05) | | | (0.06) | | | | | |
| MPL Risk Instructions Grade | (0.00) | -0.01* | | (0100) | | | | | |
| MPL Risk Confidence Grade | | (0.01) - 0.01^* | | | | | | | |
| MPL Risk Inconsistent Switching | | (0.01) 0.20^{***} | | | | | | | |
| MPL Risk Dominated Choice | | (0.02) -0.44*** | | | | | | | |
| MPL Time Instructions Grade | | (0.04) | | | -0.01 | | | | |
| MPL Time Confidence Grade | | | | | (0.01) 0.07^{***} (0.01) | | | | |
| MPL Time Inconsistent Switching | | | | | (0.01) 0.15^{**} (0.05) | | | | |
| SG Instructions Grade | | | | | (0.00) | | -0.01 (0.01) | | |
| SG Confidence Grade | | | | | | | 0.04*** (0.01) | | |
| Constant | 0.44 | -0.15 | 1.07^{***} | -0.60*** | -0.42^{***} | 0.47^{***} | -0.67^{***} | -0.59** | |
| | (0.26) | (0.14) | (0.23) | (0.13) | (0.12) | (0.09) | (0.13) | (0.10) | |
| Observations | 4271 | 4269 | 4276 | 4271 | 4271 | 4276 | 4276 | 4276 | |

Table A2: Full Regressions - Marriage and Preferences

| | | k Prefere | | | ne Prefere | | Social Preferences | | |
|---|------------------------|------------------------|------------------------|-------------------------|---------------------------------|------------------------|----------------------------------|-----------------|--|
| | rCTB | rMPL | GRQ | tCTB | tMPL | GTQ | SG | AQ | |
| Divorced in 2019 | -0.30 | -0.35^{***} | 0.05 | 0.04 | -0.25 | 0.31^{*} | 0.23 | -0.07 | |
| | (0.17) | (0.10) | (0.21) | (0.20) | (0.17) | (0.14) | (0.19) | (0.24) | |
| Divorced in 2018 | -0.14 | -0.23* | -0.22 | 0.04 | -0.19 | 0.25 | -0.03 | -0.04 | |
| Divorced in 2017 | (0.18) -0.12 | (0.11) -0.00 | (0.21) -0.14 | (0.19) -0.13 | (0.22) 0.01 | (0.20) -0.10 | (0.23) 0.10 | (0.25) -0.10 | |
| Divolecu in 2011 | (0.22) | (0.09) | (0.21) | (0.23) | (0.18) | (0.19) | (0.21) | (0.23) | |
| Marital Status (=Married) | -0.00 | -0.01 | -0.20*** | -0.07 | -0.05 | -0.08* | 0.05 | 0.00 | |
| | (0.04) | (0.02) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) | |
| Marital Status (=Widowed) | -0.29* | 0.05 | -0.15 | 0.15 | 0.05 | 0.18 | 0.02 | -0.18 | |
| Marital Status (=Divorced) | (0.12) 0.14 | (0.10) 0.04 | (0.15) 0.10 | (0.17) -0.04 | (0.12) -0.02 | (0.15) 0.06 | (0.18) -0.01 | (0.13) -0.03 | |
| Maritar Status (=ENOICCU) | (0.08) | (0.04) | (0.07) | (0.07) | (0.06) | (0.07) | (0.07) | (0.07) | |
| Parenthood (=Yes) | 0.06 | 0.04 | 0.15^{***} | -0.01 | -0.02 | 0.03 | -0.04 | -0.03 | |
| | (0.04) | (0.02) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) | |
| Sex (=Female) | -0.22*** (0.03) | -0.12*** (0.02) | -0.34*** (0.03) | 0.06 (0.03) | 0.05 (0.03) | -0.12*** (0.03) | 0.04 (0.03) | 0.29** (0.03) | |
| Age | -0.02 | -0.02** | -0.05*** | 0.00 | -0.00 | -0.02*** | 0.01*** | 0.01** | |
| 0 | (0.01) | (0.01) | (0.01) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00 | |
| Age Squared | 0.00 | 0.00* | 0.00*** | | | | | | |
| Minutian Dadaman d (Nation) | (0.00) | (0.00) | (0.00) | 0.01*** | 0.11** | 0.00 | 0.02 | 0.00 | |
| Migration Background (=Native) | (0.04) (0.04) | (0.02) (0.02) | 0.03 (0.04) | 0.21^{***} (0.05) | 0.11^{**} (0.04) | -0.02 (0.05) | (0.03) (0.04) | -0.09 (0.05) | |
| Occupation Status (=Self-Employed) | 0.04) | 0.04* | (0.04) 0.35^{***} | -0.09** | -0.07^* | (0.05) 0.18^{***} | 0.04) | 0.04 | |
| | (0.04) | (0.02) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03 | |
| Occupation Status (=Other) | -0.00 | -0.01 | 0.13* | -0.14* | -0.05 | 0.08 | 0.02 | 0.02 | |
| | (0.06) | (0.03) | (0.06) | (0.06) | (0.05) | (0.06) | (0.06) | (0.06 | |
| Education Level (=Low) | 0.04 (0.08) | -0.05 (0.04) | (0.02) (0.08) | -0.00 (0.08) | 0.03 (0.07) | -0.06 (0.08) | -0.03 (0.09) | -0.28* (0.09 | |
| Education Level (=High) | 0.04 | 0.02 | -0.02 | 0.08* | 0.18*** | 0.14*** | 0.05 | 0.17** | |
| (_) | (0.04) | (0.02) | (0.04) | (0.04) | (0.03) | (0.04) | (0.04) | (0.04 | |
| Education Level (=Unknown) | 0.06 | 0.00 | 0.01 | -0.02 | 0.05 | -0.01 | 0.06 | 0.00 | |
| Uh-ld Wlth (Oitil- 2) | (0.05) | (0.02) | (0.04) | (0.05) | (0.04) | (0.04) | (0.04) | (0.05 | |
| Household Wealth (Quintile=2) | 0.09 (0.05) | 0.03 (0.03) | -0.07 (0.05) | (0.09) | 0.14^{**} (0.04) | 0.08 (0.05) | (0.05) | -0.05 (0.05 | |
| Household Wealth (Quintile=3) | 0.07 | -0.05 | -0.10* | 0.05 | 0.14** | 0.06 | -0.08 | -0.06 | |
| | (0.05) | (0.03) | (0.05) | (0.05) | (0.04) | (0.05) | (0.05) | (0.05) | |
| Household Wealth (Quintile=4) | 0.06 | -0.02 | -0.20*** | 0.07 | 0.24*** | 0.10 | -0.07 | -0.03 | |
| Household Wealth (Quintile=5) | (0.05) 0.06 | (0.03) -0.01 | (0.05) -0.06 | (0.05) 0.10 | (0.05) 0.31^{***} | (0.05) 0.25^{***} | (0.05) -0.11 | (0.05 | |
| Household Weatth (Quintile=5) | (0.06) | (0.03) | (0.06) | (0.06) | (0.05) | (0.06) | (0.06) | (0.06 | |
| Household Income (Quintile=2) | 0.00 | 0.02 | 0.03 | 0.07 | -0.02 | -0.03 | 0.05 | -0.09 | |
| | (0.05) | (0.03) | (0.05) | (0.05) | (0.04) | (0.05) | (0.05) | (0.05) | |
| Household Income (Quintile=3) | 0.02 | 0.03 | 0.08 | 0.01 | -0.03 | 0.01 | 0.07 | 0.01 | |
| Household Income (Quintile=4) | (0.05) 0.09 | (0.03) 0.07^{**} | (0.05) 0.19^{***} | (0.05) 0.11^* | (0.04) -0.04 | (0.05) 0.02 | (0.05) 0.06 | (0.05 0.07 | |
| nousenoid income (Quintine-4) | (0.05) | (0.03) | (0.05) | (0.05) | (0.04) | (0.02) | (0.05) | (0.05) | |
| Household Income (Quintile=5) | 0.13^{*} | 0.12^{***} | 0.23*** | 0.08 | -0.10* | 0.03 | 0.06 | 0.17^{*} | |
| | (0.05) | (0.03) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | |
| Cognitive Reflection | 0.01 | 0.03** | -0.07*** | 0.09*** | 0.09*** | 0.07*** | -0.00 | 0.03* | |
| Financial Literacy | (0.02) 0.02 | (0.01) 0.02^* | (0.01) 0.08^{***} | (0.01) 0.02 | (0.01) 0.02 | (0.01) 0.10^{***} | (0.01) -0.02 | (0.01) | |
| r manciar Enteracy | (0.02) | (0.01) | (0.01) | (0.02) | (0.02) | (0.01) | (0.01) | (0.02 | |
| CTB Instructions Grade | 0.01 | (0.0-) | (0.01) | 0.03* | (0102) | (0.0-) | (0.01) | (0101 | |
| | (0.01) | | | (0.01) | | | | | |
| CTB Confidence Grade | -0.07*** | | | -0.01 | | | | | |
| CTB Dominated Choice | (0.01) 0.43^{***} | | | (0.01) - 0.16^{**} | | | | | |
| CTB Dominated Choice | (0.43) | | | (0.06) | | | | | |
| MPL Risk Instructions Grade | (0100) | -0.01^{*} | | (0.00) | | | | | |
| | | (0.01) | | | | | | | |
| MPL Risk Confidence Grade | | -0.01* | | | | | | | |
| MPI Risk Inconsistant Switching | | (0.01) 0.20^{***} | | | | | | | |
| MPL Risk Inconsistent Switching | | (0.02) | | | | | | | |
| MPL Risk Dominated Choice | | -0.44*** (0.04) | | | | | | | |
| MPL Time Instructions Grade | | (| | | -0.01 (0.01) | | | | |
| MPL Time Confidence Grade | | | | | (0.01) 0.07*** (0.01) | | | | |
| MPL Time Inconsistent Switching | | | | | (0.01) 0.16^{**} (0.05) | | | | |
| SG Instructions Grade | | | | | (0.00) | | -0.01 (0.01) | | |
| SG Confidence Grade | | | | | | | (0.01) 0.04^{***} (0.01) | | |
| Constant | 0.44 | -0.15 | 1.10*** | -0.58*** | -0.40** | 0.47*** | -0.67^{***} | -0.60* | |
| Observations | (0.26) | (0.14) | (0.23) | (0.13) | (0.12) | (0.09) | (0.13) | (0.10) | |
| Observations Adjusted R ² | 4271 0.042 | 4269 0.082 | 4276 0.090 | 4271 0.034 | $4271 \\ 0.057$ | 4276 0.125 | 4276 0.014 | 4276 0.045 | |

Table A3: Full Regressions - Divorce and Preferences

| | | k Prefere | nces | | ne Prefere | nces | Social Preferences | | |
|--|------------------------|------------------------|------------------------|-------------------------|------------------------|------------------------|--------------------|------------------|--|
| | rCTB | rMPL | GRQ | tCTB | tMPL | GTQ | SG | AQ | |
| First Parenthood in 2019 | 0.11 | 0.17^{**} | 0.04 | 0.20 | 0.15 | 0.18 | -0.17 | -0.01 | |
| | (0.13) | (0.06) | (0.12) | (0.13) | (0.12) | (0.10) | (0.12) | (0.12) | |
| First Parenthood in 2018 | 0.12 | 0.05 | 0.04 | 0.12 | 0.10 | 0.03 | -0.22 | (0.05) (0.14) | |
| First Parenthood in 2017 | (0.12) 0.26 | (0.06) 0.07 | (0.12) 0.26 | (0.14) 0.12 | (0.12) -0.04 | (0.13) -0.20 | (0.13) 0.11 | -0.09 | |
| not i dionenood in 2011 | (0.18) | (0.06) | (0.14) | (0.13) | (0.11) | (0.15) | (0.15) | (0.16) | |
| Marital Status (=Married) | -0.00 | -0.01 | -0.20*** | -0.07 | -0.05 | -0.08* | 0.05 | 0.00 | |
| | (0.04) | (0.02) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) | |
| Marital Status (=Widowed) | -0.30* | 0.05 | -0.15 | 0.14 | 0.04 | 0.18 | 0.03 | -0.18 | |
| Marital Status (=Divorced) | (0.12) 0.11 | (0.10) 0.01 | (0.15) 0.08 | (0.17) -0.04 | (0.12) -0.04 | (0.15) 0.09 | (0.18) 0.01 | (0.13) | |
| indirida Status (=Bitorood) | (0.07) | (0.03) | (0.06) | (0.07) | (0.06) | (0.06) | (0.06) | (0.06) | |
| Parenthood (=Yes) | 0.04 | 0.02 | 0.14^{**} | -0.03 | -0.03 | 0.03 | -0.02 | -0.03 | |
| | (0.04) | (0.02) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) | (0.04) | |
| Sex (=Female) | -0.22*** (0.03) | -0.11*** (0.02) | -0.34*** (0.03) | 0.06 (0.03) | 0.05 (0.03) | -0.12*** (0.03) | 0.04 (0.03) | 0.29** (0.03) | |
| Age | -0.01 | -0.02** | -0.05*** | 0.00 | -0.00 | -0.02*** | 0.01*** | 0.01** | |
| 0 | (0.01) | (0.01) | (0.01) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | |
| Age Squared | 0.00 | 0.00^{*} | 0.00*** | | | | | | |
| Minutian Badaman d (Nation) | (0.00) | (0.00) | (0.00) | 0.01*** | 0.11** | 0.09 | 0.02 | 0.00 | |
| Migration Background (=Native) | 0.03 (0.04) | (0.01) (0.02) | 0.03 (0.04) | 0.21^{***} (0.05) | (0.04) | -0.02 (0.05) | 0.03 (0.04) | -0.09 (0.05) | |
| Occupation Status (=Self-Employed) | 0.04) | 0.04* | 0.35*** | -0.09** | -0.07* | 0.18*** | 0.04) | 0.04 | |
| | (0.04) | (0.02) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) | |
| Occupation Status (=Other) | -0.01 | -0.01 | 0.13* | -0.14* | -0.06 | 0.08 | 0.02 | 0.02 | |
| | (0.06) | (0.03) | (0.06) | (0.06) | (0.05) | (0.06) | (0.06) | (0.06) | |
| Education Level (=Low) | 0.04 (0.08) | -0.05 (0.04) | (0.02) (0.08) | -0.00 (0.08) | 0.03 (0.07) | -0.06 (0.08) | -0.03 (0.09) | -0.28* (0.09) | |
| Education Level (=High) | 0.04 | 0.02 | -0.02 | 0.08* | 0.18*** | 0.14*** | 0.05 | 0.17** | |
| (0, | (0.04) | (0.02) | (0.04) | (0.04) | (0.03) | (0.04) | (0.04) | (0.04) | |
| Education Level (=Unknown) | 0.06 | 0.01 | 0.01 | -0.01 | 0.05 | -0.01 | 0.06 | 0.00 | |
| Household Wealth (Quintile=2) | (0.05) 0.08 | (0.02) 0.03 | (0.04) -0.07 | (0.05) 0.09 | (0.04) 0.14^{**} | (0.04) 0.08 | (0.04) 0.05 | (0.05) -0.05 | |
| Household weath (Quintile=2) | (0.08) | (0.03) | (0.05) | (0.05) | (0.04) | (0.08) | (0.05) | (0.05) | |
| Household Wealth (Quintile=3) | 0.06 | -0.05 | -0.10* | 0.05 | 0.13** | 0.06 | -0.07 | -0.06 | |
| | (0.05) | (0.03) | (0.05) | (0.05) | (0.04) | (0.05) | (0.05) | (0.05) | |
| Household Wealth (Quintile=4) | 0.06 | -0.03 | -0.20*** | 0.07 | 0.24*** | 0.10 | -0.06 | -0.03 | |
| Household Wealth (Quintile=5) | (0.05) 0.06 | (0.03) -0.01 | (0.05) -0.06 | (0.05) 0.10 | (0.05) 0.31^{***} | (0.05) 0.25^{***} | (0.05) -0.11 | (0.05) | |
| Household Weaten (Quintile=0) | (0.06) | (0.03) | (0.06) | (0.06) | (0.05) | (0.06) | (0.06) | (0.06) | |
| Household Income (Quintile=2) | 0.00 | 0.02 | 0.03 | 0.07 | -0.02 | -0.03 | 0.05 | -0.09 | |
| | (0.05) | (0.03) | (0.05) | (0.05) | (0.04) | (0.05) | (0.05) | (0.05) | |
| Household Income (Quintile=3) | 0.02 | (0.03) | 0.08 | 0.01 | -0.03 | 0.01 | (0.07) | 0.01 | |
| Household Income (Quintile=4) | (0.05) 0.09 | (0.03) 0.07^{**} | (0.05) 0.19^{***} | (0.05) 0.11^* | (0.04) -0.04 | (0.05) 0.03 | (0.05) 0.06 | (0.05) 0.07 | |
| fousefold meenie (quintie=1) | (0.05) | (0.03) | (0.05) | (0.05) | (0.04) | (0.05) | (0.05) | (0.05) | |
| Household Income (Quintile=5) | 0.13^{*} | 0.12^{***} | 0.23*** | 0.08 | -0.10* | 0.03 | 0.05 | 0.17^{*} | |
| | (0.05) | (0.03) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | |
| Cognitive Reflection | 0.01 | 0.03*** | -0.07*** | 0.09*** | 0.09*** | 0.07*** | -0.00 | 0.03* | |
| Financial Literacy | (0.02) 0.02 | (0.01) 0.02^* | (0.01) 0.08^{***} | (0.01) 0.02 | (0.01) 0.02 | (0.01) 0.10^{***} | (0.01) -0.02 | (0.01) 0.02 | |
| I manoral Encoracy | (0.02) | (0.01) | (0.01) | (0.02) | (0.01) | (0.01) | (0.01) | (0.01) | |
| CTB Instructions Grade | 0.01 | · / | () | 0.03^{*} | . , | . , | ` ' | | |
| ~ ~ ~ ~ | (0.01) | | | (0.01) | | | | | |
| CTB Confidence Grade | -0.07*** | | | -0.01 | | | | | |
| CTB Dominated Choice | (0.01) 0.42^{***} | | | (0.01) - 0.16^{**} | | | | | |
| | (0.05) | | | (0.06) | | | | | |
| MPL Risk Instructions Grade | | -0.01^{*} | | | | | | | |
| MPL Risk Confidence Grade | | (0.01) - 0.01^* | | | | | | | |
| | | (0.01) 0.20^{***} | | | | | | | |
| MPL Risk Inconsistent Switching MPL Risk Dominated Choice | | (0.02) -0.43*** | | | | | | | |
| | | (0.04) | | | _ | | | | |
| MPL Time Instructions Grade | | | | | -0.01 (0.01) | | | | |
| MPL Time Confidence Grade | | | | | 0.07^{***} (0.01) | | | | |
| MPL Time Inconsistent Switching | | | | | 0.15^{**} (0.05) | | | | |
| SG Instructions Grade | | | | | / | | -0.01 (0.01) | | |
| SG Confidence Grade | | | | | | | 0.04*** | | |
| Constant | 0.39 | -0.18 | 1.07*** | -0.61*** | -0.41*** | 0.46*** | (0.01) -0.64*** | -0.60** | |
| Observations | (0.26) 4271 | (0.14) 4260 | (0.23) 4276 | (0.13) 4271 | (0.13) 4271 | (0.09) 4276 | (0.13) 4276 | (0.10) | |
| Adjusted R ² | 4271 0.042 | 4269 0.081 | 4276 0.091 | 4271 0.034 | 4271 0.057 | 4276 0.125 | 4276 0.015 | 4276 0.045 | |

Table A4: Full Regressions - First Parenthood and Preferences

| | | k Prefere | | | ne Preferer | | Social Pi | |
|------------------------------------|--------------------------|-------------------------------|--------------------------|--------------------|-----------------------|------------------------|------------------------|------------------|
| N | rCTB | rMPL | GRQ | tCTB | tMPL | GTQ | SG | AQ |
| Married in 2019 | 0.03 (0.14) | 0.09 (0.07) | (0.10) (0.12) | (0.09) (0.14) | (0.13) (0.12) | 0.11 (0.09) | (0.30^{*}) (0.13) | 0.08 (0.12) |
| Married in 2018 | -0.02 | 0.01 | 0.12 | -0.08 | 0.04 | -0.10 | -0.14 | -0.11 |
| Married in 2017 | (0.10) 0.02 | (0.05) -0.01 | (0.11) -0.03 | (0.12) 0.17 | (0.10) 0.07 | (0.11) -0.00 | (0.12) 0.09 | (0.12) -0.13 |
| | (0.12) | (0.05) | (0.10) | (0.11) | (0.10) | (0.11) | (0.12) | (0.11) |
| Divorced in 2019 | -0.29 (0.17) | -0.34 ^{**} (0.10) | (0.05) (0.21) | 0.04 (0.20) | -0.25 (0.18) | (0.31^{*}) (0.14) | 0.22 (0.19) | -0.06 (0.24) |
| Divorced in 2018 | -0.14 | -0.22^{*} | -0.22 | 0.04 | -0.18 | 0.25 | -0.04 | -0.04 |
| Divorced in 2017 | (0.18) -0.12 | (0.11) -0.00 | (0.21) -0.15 | (0.19) -0.12 | (0.21) 0.02 | (0.20) -0.09 | (0.23) 0.11 | (0.25) -0.10 |
| First Dependend in 2010 | (0.22) | (0.09) | (0.21) | (0.22) | (0.18) | (0.19) | (0.21) | (0.24) |
| First Parenthood in 2019 | 0.11 (0.13) | 0.16^{**} (0.06) | (0.01) (0.12) | 0.18 (0.13) | 0.12 (0.12) | (0.19) (0.10) | -0.19 (0.12) | 0.02 (0.12) |
| First Parenthood in 2018 | 0.12 | 0.05 | 0.02 | 0.12 | 0.08 | 0.05 | -0.20 | 0.07 |
| First Parenthood in 2017 | (0.12) 0.26 | (0.07) 0.07 | (0.12) 0.25 | (0.14) 0.12 | (0.12) -0.05 | (0.13) -0.18 | (0.13) 0.14 | (0.14) -0.06 |
| Marital Status (=Married) | (0.19) | (0.06) | (0.14) -0.21*** | (0.13) | (0.12) | (0.15) | (0.15) | (0.16) |
| Marital Status (=Married) | -0.00 (0.05) | -0.02 (0.02) | (0.04) | -0.08 (0.04) | -0.07 (0.04) | -0.08 (0.04) | 0.04 (0.04) | 0.01 (0.04) |
| Marital Status (=Widowed) | -0.30* | 0.04 | -0.16 | 0.14 | 0.03 | 0.17 | 0.01 | -0.17 |
| Marital Status (=Divorced) | (0.12) 0.15 | (0.10) 0.04 | (0.15) 0.10 | (0.17) -0.04 | (0.12) -0.02 | (0.15) 0.06 | (0.18) -0.02 | (0.13) -0.02 |
| Paranthood (-Vas) | (0.08) 0.04 | (0.04) | (0.07) 0.14^{***} | (0.07) | (0.06) | (0.07) | (0.07) | (0.07) |
| Parenthood (=Yes) | (0.04) | (0.03) (0.02) | (0.04) | -0.03 (0.04) | -0.02 (0.04) | (0.03) (0.04) | -0.02 (0.04) | -0.03 (0.04) |
| Sex (=Female) | -0.22*** | -0.12*** | -0.34*** | 0.06^{*} | 0.05 | -0.11*** | 0.04 | 0.29^{**} |
| Age | (0.03) -0.01 | (0.02) -0.02** | (0.03) - 0.05^{***} | (0.03) 0.00 | (0.03) -0.00 | (0.03) -0.02*** | (0.03) 0.01^{***} | (0.03) 0.01** |
| Age Squared | (0.01) 0.00 | (0.01) 0.00^* | (0.01) 0.00^{***} | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) |
| | (0.00) | (0.00) | (0.00) | | | | | |
| Migration Background (=Native) | 0.04 (0.04) | 0.02 (0.02) | (0.03) (0.04) | 0.21*** (0.05) | 0.11** (0.04) | -0.02 (0.05) | 0.02 (0.04) | -0.09 (0.05) |
| Occupation Status (=Self-Employed) | 0.08* | 0.04* | 0.34*** | -0.09** | -0.07* | 0.18*** | 0.06 | 0.04 |
| Occupation Status (=Other) | (0.04) -0.01 | (0.02) -0.01 | (0.03) 0.13^* | (0.03) -0.14* | (0.03) -0.05 | (0.03) 0.08 | (0.03) 0.03 | (0.03) 0.02 |
| Occupation Status (=Other) | (0.06) | (0.03) | (0.06) | (0.06) | (0.05) | (0.06) | (0.06) | (0.06) |
| Education Level (=Low) | 0.04 (0.08) | -0.05 (0.04) | 0.01 (0.08) | -0.00 (0.08) | 0.03 (0.07) | -0.06 (0.08) | -0.03 (0.09) | -0.28* (0.09) |
| Education Level (=High) | 0.04 | 0.02 | -0.02 | 0.08* | 0.18*** | 0.14*** | 0.05 | 0.16** |
| Education Level (=Unknown) | (0.04) 0.06 | (0.02) 0.01 | (0.04) 0.01 | (0.04) -0.02 | (0.03) 0.05 | (0.04) -0.01 | (0.04) 0.06 | (0.04) |
| | (0.05) | (0.02) | (0.04) | (0.05) | (0.04) | (0.04) | (0.04) | (0.05) |
| Household Wealth (Quintile=2) | 0.08 | 0.03 | -0.07 | 0.09 | 0.14** | 0.08 | 0.05 | -0.05 |
| Household Wealth (Quintile=3) | (0.05) 0.07 | (0.03) -0.05 | (0.05) -0.10* | (0.05) 0.05 | (0.04) 0.14^{**} | (0.05) 0.06 | (0.05) -0.07 | (0.05) -0.06 |
| | (0.05) | (0.03) | (0.05) -0.20*** | (0.05) | (0.04) 0.24*** | (0.05) | (0.05) | (0.05) |
| Household Wealth (Quintile=4) | 0.06 (0.05) | -0.02 (0.03) | -0.20 (0.05) | (0.08) (0.05) | (0.05) | (0.10) (0.05) | -0.06 (0.05) | -0.03 (0.05) |
| Household Wealth (Quintile=5) | 0.06 | -0.01 | -0.06 | 0.10 | 0.31^{***} | 0.25^{***} | -0.10 | -0.07 |
| Household Income (Quintile=2) | (0.06) 0.00 | (0.03) 0.02 | (0.06) 0.03 | (0.06) 0.07 | (0.05) -0.02 | (0.06) -0.03 | (0.06) 0.05 | (0.06) -0.09 |
| | (0.05) | (0.03) | (0.05) | (0.05) | (0.04) | (0.05) | (0.05) | (0.05) |
| Household Income (Quintile=3) | (0.02) (0.05) | 0.03 (0.03) | (0.08) (0.05) | (0.01) (0.05) | -0.03 (0.04) | (0.01) (0.05) | (0.07) (0.05) | 0.01 (0.05) |
| Household Income (Quintile=4) | 0.09 | 0.08** | 0.19*** | 0.11^{*} | -0.04 | 0.03 | 0.06 | 0.07 |
| Household Income (Quintile=5) | (0.05) 0.13^* | (0.03) 0.12^{***} | (0.05) 0.23^{***} | (0.05) 0.08 | (0.04) -0.10* | (0.05) 0.03 | (0.05) 0.05 | (0.05) 0.17** |
| | (0.05) | (0.03) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) | (0.05) |
| Cognitive Reflection | 0.01 (0.02) | 0.03^{**} (0.01) | -0.07*** (0.01) | 0.09*** (0.01) | 0.09*** (0.01) | 0.07*** (0.01) | -0.00 (0.01) | (0.03^{*}) |
| Financial Literacy | 0.02 | 0.02^{*} | 0.08^{***} | 0.02 | 0.02 | 0.10^{***} | -0.02 | 0.02 |
| CTB Instructions Grade | (0.02) 0.01 | (0.01) | (0.01) | (0.02) 0.03^* | (0.01) | (0.01) | (0.01) | (0.01) |
| CTB Confidence Grade | (0.01) - 0.07^{***} | | | (0.01) -0.01 | | | | |
| | (0.01) | | | (0.01) | | | | |
| CTB Dominated Choice | 0.43^{***} (0.05) | | | -0.16** (0.06) | | | | |
| MPL Risk Instructions Grade | (0.00) | -0.01 | | (0.00) | | | | |
| MPL Risk Confidence Grade | | (0.01) - 0.01^* | | | | | | |
| | | (0.01) | | | | | | |
| MPL Risk Inconsistent Switching | | 0.20*** (0.02) | | | | | | |
| MPL Risk Dominated Choice | | -0.44*** | | | | | | |
| MPL Time Instructions Grade | | (0.04) | | | -0.01 | | | |
| | | | | | (0.01) | | | |
| MPL Time Confidence Grade | | | | | 0.07*** (0.01) | | | |
| MPL Time Inconsistent Switching | | | | | 0.16** (0.05) | | | |
| SG Instructions Grade | | | | | (0.05) | | -0.01 | |
| SG Confidence Grade | | | | | | | (0.01) | |
| | | | | | | | 0.04*** (0.01) | |
| a | 0.38 | -0.20 | 1.04*** | -0.62*** | -0.43*** | 0.46*** | -0.65*** | -0.59** |
| Constant | (0.26) | (0.15) | (0.23) | (0.13) | (0.13) | (0.09) | (0.13) | (0.10) |

Table A5: Full Regressions - Life Events and Preferences

Appendix B Invitation Letters and Welcome Screens



Figure B1: Invitation Letter Wave 1 (Translated from Dutch)

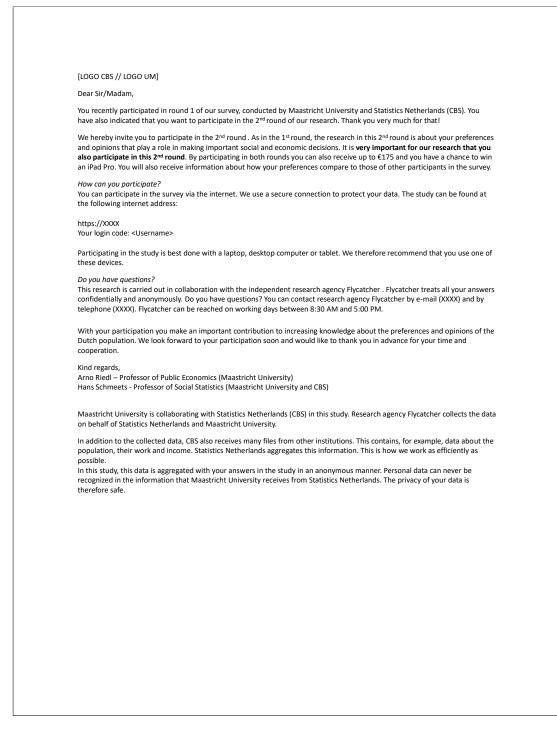


Figure B2: Invitation Letter Wave 2 (Translated from Dutch)

| sh S | Maastricht University |
|---|---|
| | |
| | ncepate in this stuay o now participating in the first round . You will be asked to make a number of choices and answer questions, of a video or text. It is important that you listen to or read these instructions carefully. |
| chance of this being 1 in 5. To determine how | ake. This is determined as follows. In the first instance, it is determined by chance <u>whether</u> you will be paid, the <u>w much</u> you will be paid, the computer randomly chooses one of the choices you made. Because all choices important that you think carefully about each of your choices before making your choice. |
| Please note: once you have made a choice an | nd clicked on "Next", it is no longer possible to change your answers. |
| very important for the research that you par | etter, this research consists of two rounds. You will receive an invitation for the second round in mid-June. It is ticipate in both rounds . In addition, only if you participate in both rounds can you earn money with your obtain information about the extent to which you are willing to take risks and how patient you are towards |
| Click Next to start. | |
| Volgende » | |
| | ▓1 © 2020 Flycatcher Internet Research 🛛 📓: +31 (0)43 326 29 92 |

Figure B3: Welcome Screen Wave 1 (Translated from Dutch)

| | Maastricht Universit |
|---|---|
| | |
| Welcome and thank you for your willingness to participate in the 2nd round of this study In this round you will again be asked to make a number of choices and answer questions, whereby you will alwa or text. It is important that you listen to or read these instructions carefully. | ays receive instructions in the form of a video |
| You can earn money You can earn money with the choices you make. This is determined as follows. In the first instance, it is determ chance of this being 1 in 5. To determine <u>how much</u> you will be paid, the computer randomly chooses one of th an equal chance of being paid out, it is important that you think carefully about each of your choices before ma | e choices you made. Because all choices have |
| Please note: once you have made a choice and clicked on "Next", it is no longer possible to change your answer | ·s. |
| Please note: Only if you complete this second round in full can you monetize your decisions, win an Apple iPad your willingness to take risks and how patient you are compared to other Dutch people. | Pro (2020) and obtain information about |
| Click Next to start. | |
| | |
| Volgende » | |
| 囊: © 2020 Flycatcher Internet Research 🚦 + +31 (0)43 326 29 92 | |

Figure B4: Welcome Screen Wave 2 (Translated from Dutch)

Appendix C Experimental Design

Convex Time Budget. We implemented two sets of the CTB, in total participants made 24 decisions. The parameters were identical in both sets, except that the late payout took place after 16 weeks in the first set and after 24 weeks in the second set. Table C1 summarizes the parameters that were used.

| Task | t | k | a_{t} | a_{t+k} | $p_{t+k} \\$ | $\mathrm{EV}(a_{t+k})$ | 1+r | 1+r' |
|------|---|----|----------|--------------|--------------|------------------------|------|------|
| #1 | 8 | 16 | €75 | €75.00 | 1 | €75.00 | 1.00 | 1.00 |
| #2 | 8 | 16 | $\in 75$ | €79.50 | 1 | €79.50 | 1.06 | 1.06 |
| #3 | 8 | 16 | €75 | €93.00 | 1 | €93.00 | 1.24 | 1.24 |
| #4 | 8 | 16 | $\in 75$ | €83.40 | 0.9 | €75.00 | 1.11 | 1.00 |
| #5 | 8 | 16 | $\in 75$ | €88.35 | 0.9 | €79.50 | 1.18 | 1.06 |
| #6 | 8 | 16 | $\in 75$ | €103.35 | 0.9 | €93.00 | 1.38 | 1.24 |
| #7 | 8 | 16 | $\in 75$ | €107.10 | 0.7 | €75.00 | 1.43 | 1.00 |
| #8 | 8 | 16 | $\in 75$ | $\in 113.55$ | 0.7 | €79.50 | 1.51 | 1.06 |
| #9 | 8 | 16 | $\in 75$ | €132.75 | 0.7 | €93.00 | 1.77 | 1.24 |
| #10 | 8 | 16 | $\in 75$ | €150.00 | 0.5 | €75.00 | 2.00 | 1.00 |
| #11 | 8 | 16 | $\in 75$ | €159.00 | 0.5 | €79.50 | 2.12 | 1.06 |
| #12 | 8 | 16 | $\in 75$ | €186.00 | 0.5 | €93.00 | 2.48 | 1.24 |

 Table C1: CTB Parameters Set 1

Notes: Set 2 is identical, except that k=24. t=delay period early date in weeks, k=delay period late date in weeks, a_t =amount available at the early date, a_{t+k} = amount available at the late date, p_{t+k} =probability that the payment at the late date is actually paid out, $EV(a_{t+k})$ =expected value of the amount available at the late date, 1+r=interest rate over the delay period not adjusted for risk, 1+r'= interest rate over the delay period adjusted for risk.

The decision tasks were presented with information on the dates, probabilities, and possible allocations on one screen, using colors for clarity. Figure C1 shows an example of such a decision screen. Before making decisions, participants received video instructions as well as the option to download written instructions in PDF format. Participants were required to watch the entire video or download the written instructions before being able to continue to the decision tasks. Figure C2 shows the screen with instructions and Figure C3 shows the written instructions (translated to English). The video narrated roughly the same text as the written instructions while highlighting the relevant parts of the decision screen.

| Keuz | e 2 va | in 25 | | | | | | | | | | | | | | | | | |
|-------------------|---------|--------|-------------------------|---------------------------|----------------------|---------------------------|------------------------------|-----------------------|---|--------------------------------|--|---------------------------|----------------------|----------------|-----------------|-------------------------------|--------------------------------------|-------------------------|------------------------------------|
| | | | | | | | | | | | | | | | | | | | |
| Vanda | ag | | | | | Vro | ege uitb | etaling | g (ove | r 8 weke |) | | Late u | itbetal | ling (d | over 10 | 6 wek | en) | |
| | | м | el 2020 | | | | | Ju | ili 2020 | | | | | | Septe | mber : | 2020 | | |
| Zo | Ма | Di | Wo Do | o Vr | Za | Z | o Ma | DI | Wo | Do V | Za | | Zo | Ma | DI | Wo | Do | Vr | Za |
| | | | | 1 | | | | | 1 | 2 | 4 | | | | 1 | 2 | 3 | 4 | 5 |
| 3 | 4 | 5 | | 7 8 | | | 5 6 | 7 | 8 | 9 | | | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 10 | 11 | 12 | | 14 15 | | 1 | 12 13 | 14 | 15 | 16 | 18 | | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 17 | 18 | 19 | 20 2 | 21 22 | 2 23 | | 9 20 | 21 | 22 | 23 | | | 20 | 21 | 22 | 23 | 24 | 25 | 20 |
| _ | | | 27 | 10 20 | 20 | 1 | 19 20 | 61 | 66 | 20 | 25 | | | | | | | | 26 |
| 31 | | 26 | 27 2 | 28 29 |) 30 | 2 D | e kans aadwer | 28 dat d | 29 e vro | 30 ege ui | petalir | | 27 De l | | | 30 e late c plaa | e uitk | oetal | |
| 31 | | 26 | 27 | 28 29 | 30 | 2 D | e kans | 28 dat d kelijk | 29 le vro k plaa | 30 ege ui | oetalir is 100 | 1% | 27 De k daa | ans (| dat d kelijk | e late plaa | e uitk Itsvin | oetal dt is | ing |
| Kies | e com | nbinal | ie van uit | tbetaling | gen die | 2 D | e kans aadwer | 28 dat d kelijk | 29 le vro c plaa | 30 sege ui tsvind % kans | petalir is 100 vel uitb | etaald | De k daad | dwer | dat d kelijk | e late plaa | e uitt itsvin)% kar | oetal dt is | ing 5 100 % el uitbe |
| Kies | o en he | nbinal | ie van uit | tbetaling drag (m | gen die | D da u het liefst z | e kans aadwer | 28 dat d kelijk | 29 e vro c plaa 100 et bowe | 30 sege ui tsvind % kans | petalir is 100 vel uitb | etaald et de bl ip. | De k daad | kans o dwer | dat d kelijk | e late plaa | e uitk itsvin 0% kar uitbet | oetal dt is | ing s 100 % el uitbe |
| Kies (tijdsti | o en he | nbinat | ie van uit ferste be | tbetaling drag (m 6 | gen die net de ge | u het liefst z | e kans aadwer cou hebb | 28 dat d kelijk | 29 e vro c plaa 100 et bowe etaling 5 | 30 sege ui tsvind % kans | petalir is 100 vel uitb rag (me te tijdst | etaald et de bl | De k daad daad | kans o dwer | dat d kelijk | e late plaa 100 | e uitk Itsvin 0% kar uitbet | oetal dt is ns we | ling 5 100 9 el uitbe |

Figure C1: Example Decision Screen CTB

| | | Maastricht University |
|---|---|---|
| geld u op een laat tijdstip wilt ontvangen. Het | geld op het vroege tijdstip zul situatie krijgt u informatie over | atie kiest u hoeveel geld u op een <u>vroeg</u> en hoeveel u altijd zeker ontvangen. Het geld op het late tijdstip de kans waarmee u het geld op het late tijdstip zuit ook lezen door hie r te klikken. |
| Vandaaq | Vroege uitbetaling (over 8 weken) | Late ultbetaling (over 12 weken) |
| Juni 2020 | Juli 2020 | Augustus 2020 |
| 20 100 100 100 100 100 100 100 100 100 1 | Zo Ma Di Wo Do Vr Za 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 19 17 10 | 2a 4a 5a 4a 5a 5a 7a 7a <th7a< th=""> 7a 7a 7a<!--</td--></th7a<> |
| | De kans dat de vroege uitbetaling daadwerkelijk plaatsvindt is 100% | De kano dat de late uitbetaling daadwerkelijk plaatsvindt is 90% Mar 100% kans wel uitbetaald 100% kans wel uitbetaald |
| | It linfs zou hebben. Hit bovenste bedrag (met de bl chtergroh) is de uitbetaling op het las tijdstp. 6 92.16 45 97.56 35 0 0 0 0 0 75 26.13 97.50 46.08 66.25 | aver acting yord s di atteidang op het verge 220 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |
| Ik bevestig dat ik de instructie goed beluisterd of g Volgende » | gelezen heb. | |
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Figure C2: Instructions Screen CTB

Instructions Part [1/4]

In part 1 of the study, you will be presented with 24 decision situations. In each decision situation, you choose **how much money you want to receive at an "early" and how much money you want to receive at a "late" time**. You will always receive the money at the early time with certainty. You will receive the money at the late time with a certain probability. In each decision situation, you will get information about the probability with which you will receive the money at the late time.

How do you make choices?

How you make choices is explained using the example below. The example shows a decision situation in which you are asked to divide a sum of money between an amount of money at an early time (in this example July 27) and an amount of money at a late time (in this example August 24). The times will be different in the choices you make later.

The calendars indicate times relevant to your choice. Today (June 1 in this example) is highlighted in green. The time of the early payout in each decision situation is exactly 8 weeks from today and is marked in blue. The time of the late payout in this example is 12 weeks from today and is highlighted in yellow. The time of the late payment may differ between decision situations.

Below the calendars you will see the probability of actually receiving the money at the late time. In this example, this probability is 80% (i.e. a probability of 8 in 10). **This probability can differ between decision situations.**

At the bottom of the page you can see the possible divisions of the amount of money in this example. The top amount (with the blue background) shows the amount of money you will receive at the early time. The bottom amount (with the yellow background) shows the amount of money you will receive at the late time with a certain probability.

Explanation of payments in this example. Do you choose:

Iten you would receive €70 at the early time (27 July) and receive €0 at the late time (24 August)

then you would receive €30 at the early time (27 July) and receive €56,63 at the late time (24 August)
 and is the probability that you receive the money at the late time 80%.

then you would receive €0 at the early time (27 July) and receive €93,75 at the late time (24 August) and early time (24 August) and early time (27 July) and receive the money at the late time 80%.

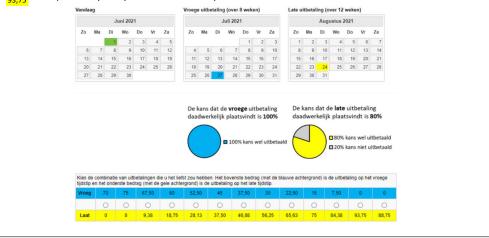


Figure C3: Written Instructions CTB (Translated from Dutch)

Multiple Price List Time Preferences. Tables C2 and C3 show the parameters used for the tMPLs.

| | Opt | tion A | Opt | tion B |
|----|-----|--------------|-----|--------------|
| | € | Delay Period | € | Delay Period |
| #1 | 75 | 8 weeks | 75 | 16 weeks |
| #2 | 75 | 8 weeks | 76 | 16 weeks |
| #3 | 75 | 8 weeks | 77 | 16 weeks |
| #4 | 75 | 8 weeks | 79 | 16 weeks |
| #5 | 75 | 8 weeks | 81 | 16 weeks |
| #6 | 75 | 8 weeks | 84 | 16 weeks |
| #7 | 75 | 8 weeks | 87 | 16 weeks |
| #8 | 75 | 8 weeks | 91 | 16 weeks |
| #9 | 75 | 8 weeks | 95 | 16 weeks |

Table C2: MPL-Time List 1

Table C3: MPL-Time List 2

| | Opt | tion A | Opt | tion B |
|----|-----|--------------|-----|--------------|
| | € | Delay Period | € | Delay Period |
| #1 | 75 | 8 weeks | 75 | 24 weeks |
| #2 | 75 | 8 weeks | 76 | 24 weeks |
| #3 | 75 | 8 weeks | 77 | 24 weeks |
| #4 | 75 | 8 weeks | 79 | 24 weeks |
| #5 | 75 | 8 weeks | 81 | 24 weeks |
| #6 | 75 | 8 weeks | 84 | 24 weeks |
| #7 | 75 | 8 weeks | 87 | 24 weeks |
| #8 | 75 | 8 weeks | 91 | 24 weeks |
| #9 | 75 | 8 weeks | 95 | 24 weeks |

The decision tasks were presented in a list of binary choices with information about the delay period and outcomes. Figure C4 shows an example of a tMPL as presented to participants. Before making decisions, participants received video instructions as well as the option to download written instructions in PDF format. Participants were required to watch the entire video or download the written instructions before being able to continue to the decision tasks. Figure C5 shows the screen with instructions and Figure C6 shows the written instructions (translated to English). The video narrated roughly the same text as the written instructions while highlighting the relevant parts of the decision screen.

| - | | | ~ | aastricht Universit |
|----|------------------|-------------------|---|---------------------|
| (| uze 1 van 21 | | | |
| | Optie A | Optie B | | |
| 1 | €75 over 8 weken | €75 over 16 weken | | |
| 2 | €75 over 8 weken | €76 over 16 weken | | |
| 3 | €75 over 8 weken | €77 over 16 weken | | |
| 4 | €75 over 8 weken | €79 over 16 weken | | |
| 5 | €75 over 8 weken | €81 over 16 weken | | |
| 6 | €75 over 8 weken | €84 over 16 weken | | |
| 7 | €75 over 8 weken | €87 over 16 weken | | |
| 8 | €75 over 8 weken | €91 over 16 weken | | |
| 9 | €75 over 8 weken | €95 over 16 weken | | |
| Vo | lgende » | | | |

Figure C4: Example Decision Screen tMPL, Version 1

| In the second | | | | | | | | | |
|---|---------------------------------|---|----------------------------|---------|---|-------------|--------------------------|---------------|----------------|
| Instructie deel 1 van 2, onderdeel I Dit onderdeel bestaat uit twee keuzesitu | uaties. In el | ke keuzesitua | atie | kie | est u tussen opt | tie A en or | otie B. D | e opties vers | chillen in het |
| geldbedrag dat u krijgt en het tijdstip v | | | | | | | | | |
| Hoe maakt u keuzes? | | | | | | | | | |
| Hoe u keuzes maakt, wordt uitgelegd in | de video hi | ieronder. U ku | unt | de | instructie ook le | zen door h | i <mark>er</mark> te kli | ikken. | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | Optie A | | | Optie B | | | | |
| | 1 | Optie A €50 over 5 weken | 0 | 0 | Optie B €50 over 10 weken | | | | |
| | 1 2 | | ~ | ~ | | | | | |
| | | €50 over 5 weken | 0 | 0 | €50 over 10 weken | | | | |
| | 2 | €50 over 5 weken €50 over 5 weken | 0 | 0 | €50 over 10 weken €51 over 10 weken | | | | |
| | 2 3 | €50 over 5 weken €50 over 5 weken €50 over 5 weken | 0000 | 0000 | €50 over 10 weken €51 over 10 weken €52 over 10 weken | | | | |
| | 2 3 4 | €50 over 5 weken €50 over 5 weken €50 over 5 weken €50 over 5 weken | 0000 | 00000 | €50 over 10 weken €51 over 10 weken €52 over 10 weken €53 over 10 weken | | | | |
| | 2 3 4 5 | €50 over 5 weken €50 over 5 weken €50 over 5 weken €50 over 5 weken €50 over 5 weken | 000000 | 000000 | €50 over 10 weken €51 over 10 weken €52 over 10 weken €53 over 10 weken €54 over 10 weken | | | | |
| | 2 3 4 5 6 | C50 over 5 weiken | 0 0 0 0 0 0 | | | | | | |
| | 2 3 4 5 6 7 | €50 over 5 weken €50 over 5 weken | | 0000000 | | | | | |
| | 2 3 4 5 6 7 8 | E50 over 5 weken E50 over 5 weken | | 0000000 | 650 over 10 weken 651 over 10 weken 652 over 10 weken 654 over 10 weken 656 over 10 weken 656 over 10 weken 657 over 10 weken | | | | |

Volgende »

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Figure C5: Instructions Screen tMPL

Instructions part [1.1/2]

This part consists of two decision situations. In each decision situation you choose between **option A** and **option B**. The options **differ** in the **amount of money** you receive and the **time** when the amount of money is paid out.

How do you make choices?

How you make choices is explained using the example below. The example shows a choice situation in which you are asked to make **9 choices** between option A and option B.

Option A is the same in every row. If you choose option A in this example, you will receive **€50**. This amount will be paid **in 5 weeks**.

Option B differs in each row. If you choose option B in this example, you will receive €50 or more. This amount will be paid in 10 weeks.

You make your choices by clicking on one of the radio buttons. Note: you must make a choice in each row.

| | Optie A | | | Optie B |
|---|------------------|---|---|-------------------|
| 1 | €50 over 5 weken | 0 | 0 | €50 over 10 weken |
| 2 | €50 over 5 weken | 0 | 0 | €51 over 10 weken |
| 3 | €50 over 5 weken | 0 | 0 | €52 over 10 weken |
| 4 | €50 over 5 weken | 0 | 0 | €53 over 10 weken |
| 5 | €50 over 5 weken | 0 | 0 | €54 over 10 weken |
| 6 | €50 over 5 weken | 0 | 0 | €55 over 10 weken |
| 7 | €50 over 5 weken | 0 | 0 | €56 over 10 weken |
| 8 | €50 over 5 weken | 0 | 0 | €57 over 10 weken |
| 9 | €50 over 5 weken | 0 | 0 | €58 over 10 weken |

Figure C6: Written Instructions tMPL

Multiple Price List Risk Preferences. Tables C4 to C8 show the parameters used for the rMPLs.

| | | | Optio | n A | | | С | ption | В | |
|-----|-----|----|-------|-----|---------------------------|-----|-----|-------|---|---------------------------|
| | р | € | р | € | $\mathrm{EV}(\mathrm{A})$ | р | € | р | € | $\mathrm{EV}(\mathrm{B})$ |
| #1 | 0.1 | 80 | 0.9 | 64 | €66 | 0.1 | 154 | 0.9 | 4 | €19 |
| #2 | 0.2 | 80 | 0.8 | 64 | €67 | 0.2 | 154 | 0.8 | 4 | €34 |
| #3 | 0.3 | 80 | 0.7 | 64 | €69 | 0.3 | 154 | 0.7 | 4 | €49 |
| #4 | 0.4 | 80 | 0.6 | 64 | €70 | 0.4 | 154 | 0.6 | 4 | €64 |
| #5 | 0.5 | 80 | 0.5 | 64 | €72 | 0.5 | 154 | 0.5 | 4 | €79 |
| #6 | 0.6 | 80 | 0.4 | 64 | €74 | 0.6 | 154 | 0.4 | 4 | €94 |
| #7 | 0.7 | 80 | 0.3 | 64 | €75 | 0.7 | 154 | 0.3 | 4 | €109 |
| #8 | 0.8 | 80 | 0.2 | 64 | €77 | 0.8 | 154 | 0.2 | 4 | €124 |
| #9 | 0.9 | 80 | 0.1 | 64 | €78 | 0.9 | 154 | 0.1 | 4 | €139 |
| #10 | 1 | 80 | 0 | 64 | €80 | 1 | 154 | 0 | 4 | €154 |

Table C4: MPL-PGp List 1

Notes: EV(A) and EV(B) list the expected value of the related lottery.

Table C5: MPL-PGp List 2

| | | | Optio | n A | | | C | Option | В | |
|-----|-----|----|-------|-----|---------------------------|-----|-----|--------|----|----------|
| | р | € | р | € | $\mathrm{EV}(\mathrm{A})$ | р | € | р | € | EV(B) |
| #1 | 0.1 | 99 | 0.9 | 41 | €47 | 0.1 | 134 | 0.9 | 19 | €31 |
| #2 | 0.2 | 99 | 0.8 | 41 | €53 | 0.2 | 134 | 0.8 | 19 | €42 |
| #3 | 0.3 | 99 | 0.7 | 41 | €58 | 0.3 | 134 | 0.7 | 19 | $\in 54$ |
| #4 | 0.4 | 99 | 0.6 | 41 | €64 | 0.4 | 134 | 0.6 | 19 | $\in 65$ |
| #5 | 0.5 | 99 | 0.5 | 41 | €70 | 0.5 | 134 | 0.5 | 19 | €77 |
| #6 | 0.6 | 99 | 0.4 | 41 | €76 | 0.6 | 134 | 0.4 | 19 | €88 |
| #7 | 0.7 | 99 | 0.3 | 41 | €82 | 0.7 | 134 | 0.3 | 19 | €100 |
| #8 | 0.8 | 99 | 0.2 | 41 | €87 | 0.8 | 134 | 0.2 | 19 | €111 |
| #9 | 0.9 | 99 | 0.1 | 41 | €93 | 0.9 | 134 | 0.1 | 19 | €123 |
| #10 | 1 | 99 | 0 | 41 | €99 | 1 | 134 | 0 | 19 | €134 |

Notes: EV(A) and EV(B) list the expected value of the related lottery.

Table C6: MPL-SGsure List 1

| | | Option | A | | | Optio | n B | |
|-----|---|--------|---------------------------|-----|----|-------|-----|---------------------------|
| | р | € | $\mathrm{EV}(\mathbf{A})$ | р | € | р | € | $\mathrm{EV}(\mathrm{B})$ |
| #1 | 1 | 52 | €52 | 0.5 | 30 | 0.5 | 130 | €80 |
| #2 | 1 | 57 | €57 | 0.5 | 30 | 0.5 | 130 | €80 |
| #3 | 1 | 63 | €63 | 0.5 | 30 | 0.5 | 130 | €80 |
| #4 | 1 | 68 | €68 | 0.5 | 30 | 0.5 | 130 | €80 |
| #5 | 1 | 73 | €73 | 0.5 | 30 | 0.5 | 130 | €80 |
| #6 | 1 | 78 | €78 | 0.5 | 30 | 0.5 | 130 | €80 |
| #7 | 1 | 82 | €82 | 0.5 | 30 | 0.5 | 130 | €80 |
| #8 | 1 | 88 | €88 | 0.5 | 30 | 0.5 | 130 | €80 |
| #9 | 1 | 94 | €94 | 0.5 | 30 | 0.5 | 130 | €80 |
| #10 | 1 | 101 | €101 | 0.5 | 30 | 0.5 | 130 | €80 |

Notes: EV(A) and EV(B) list the expected value of the related lottery.

| | | Opt | ion A | | | Option | В | |
|-----|---|-----|-------|------|----|--------|-----|---------------------------|
| | р | € | EV(A) | р | € | р | € | $\mathrm{EV}(\mathrm{B})$ |
| #1 | 1 | 39 | €39 | 0.33 | 20 | 0.67 | 110 | €80 |
| #2 | 1 | 46 | €46 | 0.33 | 20 | 0.67 | 110 | €80 |
| #3 | 1 | 56 | €56 | 0.33 | 20 | 0.67 | 110 | €80 |
| #4 | 1 | 64 | €64 | 0.33 | 20 | 0.67 | 110 | €80 |
| #5 | 1 | 70 | €70 | 0.33 | 20 | 0.67 | 110 | €80 |
| #6 | 1 | 75 | €75 | 0.33 | 20 | 0.67 | 110 | €80 |
| #7 | 1 | 79 | €79 | 0.33 | 20 | 0.67 | 110 | €80 |
| #8 | 1 | 84 | €84 | 0.33 | 20 | 0.67 | 110 | €80 |
| #9 | 1 | 88 | €88 | 0.33 | 20 | 0.67 | 110 | €80 |
| #10 | 1 | 93 | €93 | 0.33 | 20 | 0.67 | 110 | €80 |

Table C7: MPL-SGsure List 2

Notes: EV(A) and EV(B) list the expected value of the related lottery.

| | | | Optio | n A | | Option B | | | | | |
|-----|-----|----|-------|-----|---------------------------|----------|-----|-----|----|---------------------------|--|
| | р | € | р | € | $\mathrm{EV}(\mathbf{A})$ | р | € | р | € | $\mathrm{EV}(\mathrm{B})$ | |
| #1 | 0.5 | 90 | 0.5 | 70 | €80 | 0.5 | 103 | 0.5 | 35 | €69 | |
| #2 | 0.5 | 90 | 0.5 | 70 | €80 | 0.5 | 109 | 0.5 | 35 | €72 | |
| #3 | 0.5 | 90 | 0.5 | 70 | €80 | 0.5 | 115 | 0.5 | 35 | €75 | |
| #4 | 0.5 | 90 | 0.5 | 70 | €80 | 0.5 | 122 | 0.5 | 35 | €79 | |
| #5 | 0.5 | 90 | 0.5 | 70 | €80 | 0.5 | 128 | 0.5 | 35 | €82 | |
| #6 | 0.5 | 90 | 0.5 | 70 | €80 | 0.5 | 131 | 0.5 | 35 | €83 | |
| #7 | 0.5 | 90 | 0.5 | 70 | €80 | 0.5 | 138 | 0.5 | 35 | €87 | |
| #8 | 0.5 | 90 | 0.5 | 70 | €80 | 0.5 | 153 | 0.5 | 35 | €94 | |
| #9 | 0.5 | 90 | 0.5 | 70 | €80 | 0.5 | 170 | 0.5 | 35 | €103 | |
| #10 | 0.5 | 90 | 0.5 | 70 | €80 | 0.5 | 186 | 0.5 | 35 | €111 | |

Table C8: MPL-PGhigh

Notes: EV(A) and EV(B) list the expected value of the related lottery.

The decision tasks were presented in lists of binary choices with information about the probabilities and outcomes. Figure C7 shows an example of MPL-PGp 1 as presented to participants. Before making decisions, participants received video instructions as well as the option to download written instructions in PDF format. Participants were required to watch the entire video or download the written instructions before being able to continue to the decision tasks. Figure C8 shows the screen with instructions and Figures C9 and C10 show the written instructions (translated to English). The video narrated roughly the same text as the written instructions while highlighting the relevant parts of the decision screen.

| ų | | | | | | | | | 🗞 Maastricht University | | |
|------------|----------------|---|-----|----|------------|---------------|-------------|-----------|-------------------------|--|--|
| | | | | | | | | | • | | |
| | | | | | | | | | | | |
| <u>Keu</u> | Keuze 3 van 21 | | | | | | | | | | |
| | OPTIE A | | | | | OPTIE B | | | | | |
| 1 | €80 | ۲ | €64 | | | €154 | | €4 | | | |
| 2 | €80 | ٢ | €64 | | | €154 | | €4 | | | |
| 3 | €80 | 2 | €64 | | | €154 | 2 | €4 | | | |
| 4 | €80 | 9 | €64 | | | €154 | - | €4 | | | |
| 5 | €80 | - | €64 | | | €154 | - | €4 | | | |
| 6 | €80 | | €64 | | | €154 | - | €4 | | | |
| 7 | €80 | | €64 | | | €154 | | €4 | | | |
| 8 | €80 | | €64 | | | €154 | <u>-</u> | €4 | | | |
| 9 | €80 | ? | €64 | | | €154 | | €4 | | | |
| 10 | €80 | - | €64 | | | €154 | - | €4 | | | |
| Vol | gende » | | | | | | | | | | |
| | - | 1 | | | | | | | | | |
| | | | | ×: | © 2020 Fly | catcher Inter | net Researc | h 🖬:+31 (| 0)43 326 29 92 | | |

Figure C7: Example Decision Screen MPL-PGp 1



| keuzes? maakt, wo | rdt uitgele | egd in d | e video hier | onder. U | J kunt d | le instru | uctie ool | k lezen doo | r hier te klil | kken. | |
|----------------------|-------------|----------|--------------|----------|----------|-----------|-----------|----------------|----------------|-------|--|
| | | | OPTIE A | | | | | OPTIE B | | | |
| | 1 | €68 | 80 | €50 | 0 | 0 | €102 | 505 500 | €10 | | |
| | 2 | €68 | 85 85 | €50 | 0 | 0 | €106 | 50K 50K | €10 | | |
| | 3 | €68 | 87 85 | €50 | 0 | 0 | €110 | 505 500 | €10 | | |
| | 4 | €68 | 85 85 | €50 | 0 | 0 | €114 | 10 | €10 | | |
| | 5 | €68 | 501 505 | €50 | 0 | 0 | €118 | 99 98 | €10 | | |

Ik bevestig dat ik de instructie goed beluisterd of gelezen heb.

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Figure C8: Instructions Screen rMPL

Instructions part [1.2/2]

This part consists of five decision situations. In each decision situation you choose between **option A** and **option B**. The options differ either in the **probability** of earning a sum of money or in the **amount** of money that you can earn with a certain probability. You will always receive information about the amount of money and the chance with which you can receive this amount for both option A and option B.

How do you make choices?

How you make choices is explained using the two examples below.

Decision situation Type 1

The screen shows a decision situation in which you are asked to make a choice between **option A** and **option B** in **each row** (in this example 1 to 5).



In this example, **Option A is the same in every row**. In this option you will see two amounts, in this example **€68** (the amount with the yellow background) and **€50** (the amount with the blue background). If you choose option A, you will receive one of these amounts with a certain probability. This probability is stated in the middle of the two amounts. In this example, **the probability of receiving €68 is 50%** (i.e. a 5 in 10 chance) and **the probability of receiving €50 is 50%** (i.e. a 5 in 10 chance).

In this example, **Option B is different in each row**. In this option you will see two amounts in each row, in this example €102 or more (the amount with the yellow background) and €10 (the amount with the blue background). If you choose option B, you will receive one of these amounts with a certain probability. This probability is stated in the middle of the two amounts. In this example, the probability of receiving €102 or more is 50% (i.e. a 5 in 10 chance) and the probability of receiving €10 is 50% (i.e. a 5 in 10 chance).

You make your choices by clicking on one of the radio buttons. Note: you must make a choice in each row.

On the next page are instructions for the example of Decision Situation Type 2.



Decision situation Type 2

The screen shows a decision situation in which you are asked to make a choice between **option A** and **option B** in **each row** (in this example 1 to 5).



Option A is different in each row. In this option you will see two amounts, in this example **€68** (the amount with the yellow background) and **€50** (the amount with the blue background). If you choose option A, you will receive one of these amounts with a certain probability. This probability is stated in the middle of the two amounts and differs per row. For example, in row 1, the top row, the probability of receiving **€68** is **10%** (i.e. a 1 in 10 chance) and the probability of receiving **€50** is **90%** (i.e. a 9 in 10 chance). For example, in row 5, the bottom row, the probability of receiving **€50** is **50%** (i.e. a 5 in 10 chance) and the probability of receiving **€50** is **50%** (i.e. a 5 in 10 chance).

Option B is different in each row. In this option you see two different amounts than in option A, in this example €106 (the amount with the yellow background) and €10 (the amount with the blue background). If you choose option B, you will receive one of these amounts with a certain probability. This probability is stated in the middle of the two amounts and differs per row. The probability of receiving the amount with the yellow or blue background are the same in option A as in option B in each row. For example, in row 1, the top row, the probability of receiving €106 is 10% (i.e. a chance of 1 in 10) and the probability of receiving €10 is 90% (i.e. a 9 in 10 chance). For example, in row 5, the bottom row, the probability of receiving €106 is 50% (i.e. a 5 in 10 chance) and the probability of receiving €10 is 50% (i.e. a 5 in 10 chance).

You make your choices by clicking on one of the radio buttons. Note: you must make a choice in each row.

Figure C10: Written Instructions rMPL Page 2 (Translated from Dutch)

Solidarity Game. For the solidarity game, participants only received written instructions. Figure C11 shows the screen with instructions and Figure C12 shows the decision screen as presented to participants.

| Instructi | | | | |
|---|---|--|---|--|
| In dit dee | e deel 3 van I wordt <mark>u ge</mark> k | oppeld aan een anor | nieme medeburger (genoemd 'ander') die ook de | eineemt aan het onderzoek. U zuit de |
| identiteit | an de ander | nooit te weten komen e | en de ander zal nooit uw identiteit te weten komen | |
| Er ziin vi | er mogelijke | situaties. | | |
| | | | oordoet, uw taak en de taak van de ander in elke | situatie wordt hier beschreven. U kunt dit |
| ook terug | zien in de or | nderstaande tabel. | | |
| Situatio | l l en de ar | der ontvangen elk 6 | 30. U en de ander hoeven niets te doen. | |
| | | atie optreedt, is 5 op 1 | | |
| | | and ophicola, is a op it | (u | |
| | | | U en de ander hoeven niets te doen. | |
| De kans | | | | |
| | uat deze situ | atie optreedt, is 1 op 1 | 0 (d.w.z. 10%). | |
| | | | . , | net u te delen. Dit kan op elke wiize die i |
| | U ontvang | | 0 (d.w.z. 10%). angt €80. De ander kan beslissen om de €80 n | net u te delen. Dit kan op elke wijze die (|
| Situatie 3 ander we | : U ontvang nst. | | angt €80. De ander kan beslissen om de €80 n | net u te delen. Dit kan op elke wijze die e |
| <u>Situatie 3</u> ander we De kans | : U ontvang nst. dat deze situ | t €0 en de ander ontva atie optreedt, is 2 op 10 | angt €80. De ander kan beslissen om de €80 n 0 (d.w.z. 20%). | |
| <u>Situatie 3</u> ander we De kans | : U ontvang nst. dat deze situ | t €0 en de ander ontva atie optreedt, is 2 op 10 | angt €80. De ander kan beslissen om de €80 n | |
| Situatie 3 ander we De kans Situatie 4 u wenst. | : U ontvang nst. dat deze situ : U ontvang | t €0 en de ander ontva atie optreedt, is 2 op 10 | angt €80. De ander kan beslissen om de €80 n 0 (d.w.z. 20%). vangt €0. U kunt beslissen om uw €80 met de | |
| <u>Situatie 3</u> ander we De kans <u>Situatie 4</u> u wenst. De kans | : U ontvang nst. dat deze situ : U ontvang dat deze situ | t €0 en de ander ontv atie optreedt, is 2 op 1 t €80 en de ander ont atie optreedt, is 2 op 1 | angt €80. De ander kan beslissen om de €80 n 0 (d.w.z. 20%). vangt €0. U kunt beslissen om uw €80 met de 0 (d.w.z. 20%). | ander te delen. Dit kan op elke wijze die |
| Situatie 3 ander we De kans Situatie 4 u wenst. De kans Situatie | : U ontvang nst. dat deze situ : U ontvang dat deze situ U ontvangt | t €0 en de ander ontvi atle optreedt, is 2 op 10 t €80 en de ander ontvi atle optreedt, is 2 op 10 De andere ontvangt | angt €80. De ander kan beslissen om de €80 n 0 (d.w.z. 20%). vangt €0. U kunt beslissen om uw €80 met de 0 (d.w.z. 20%). Uw taak | |
| Situatie 3 ander we De kans Situatie 4 u wenst. De kans Situatie 1 | : U ontvang nst. dat deze situ : U ontvang dat deze situ U ontvangt 80 euro | t €0 en de ander ontv atie optreedt, is 2 op 14 t €80 en de ander ont atie optreedt, is 2 op 14 De andere ontvangt 80 euro | angt €80. De ander kan beslissen om de €80 n 0 (d.w.z. 20%). vangt €0. U kunt beslissen om uw €80 met de 0 (d.w.z. 20%). Uw taak U hoeft niets te doen | ander te delen. Dit kan op elke wijze die Taak van de ander De ander hoeft niets te doen |
| Situatie 3 ander we De kans Situatie 4 u wenst. De kans Situatie 1 2 | : U ontvang nst. dat deze situ : U ontvang dat deze situ U ontvangt | t €0 en de ander ontvi atle optreedt, is 2 op 10 t €80 en de ander ontvi atle optreedt, is 2 op 10 De andere ontvangt | angt €80. De ander kan beslissen om de €80 n 0 (d.w.z. 20%). vangt €0. U kunt beslissen om uw €80 met de 0 (d.w.z. 20%). Uw taak | ander te delen. Dit kan op elke wijze die Taak van de ander De ander hoeft niets te doen De ander hoeft niets te doen |
| Situatie 3 ander we De kans Situatie 4 u wenst. De kans Situatie 1 2 3 | : U ontvang nst. dat deze situ : U ontvang dat deze situ U ontvangt 80 euro | t €0 en de ander ontv atie optreedt, is 2 op 14 t €80 en de ander ont atie optreedt, is 2 op 14 De andere ontvangt 80 euro | angt €80. De ander kan beslissen om de €80 n 0 (d.w.z. 20%). vangt €0. U kunt beslissen om uw €80 met de 0 (d.w.z. 20%). Uw taak U hoeft niets te doen U hoeft niets te doen U hoeft niets te doen | ander te delen. Dit kan op elke wijze die Taak van de ander De ander hoeft niets te doen De ander hoeft niets te doen Beslissen hoe 80 euro met u te delen |
| Situatie 3 ander we De kans Situatie 4 u wenst. De kans Situatie 1 2 | : U ontvang nst. dat deze situ : U ontvang dat deze situ U ontvangt 80 euro 0 euro | t €0 en de ander ontv atie optreedt, is 2 op 1 t €80 en de ander ontr atie optreedt, is 2 op 1 De andere ontvangt 80 euro 0 euro | angt €80. De ander kan beslissen om de €80 n 0 (d.w.z. 20%). vangt €0. U kunt beslissen om uw €80 met de 0 (d.w.z. 20%). Uw taak U hoeft niets te doen U hoeft niets te doen | ander te delen. Dit kan op elke wijze dk Taak van de ander De ander hoeft niets te doen De ander hoeft niets te doen |

Figure C11: Instructions Screen Solidarity Game

| | Maastricht University |
|--|---|
| Vraag 2 van 5 | |
| Uw beslissing | |
| Stel dat situatie 4 zich voordoet. In dat geval ontvangt | t u €80 en de ander €0. |
| | in dan u. U weet niet hoe oud de ander is. We vragen u daarom om in geven hoeveel u de ander geeft in de situatie waar u €80 ontvangt en de |
| Als de ander tussen 16 en 34 jaar oud is, geef ik de ander | € (€0 t/m €80, alleen hele euro's) |
| Als de ander tussen 35 en 54 jaar oud is, geef ik de ander | € (€0 t/m €80, alleen hele euro's) |
| Als de ander 55 jaar of ouder is, geef ik de ander | € (€0 t/m €80, alleen hele euro's) |
| Volgende » | |
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Figure C12: Decision Screen Solidarity Game