

ONLINE APPENDIX

Projective Paternalism

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A Proofs

We repeatedly use the fact that if G and H are two probability distributions such that G dominates H in the first order, then for any non-decreasing function f , $\int f(u)dG(u) \geq \int f(u)dH(u)$. We also make repeated use of the fact that if X and Y are two random variables such that X dominates Y in the first order, then for any non-decreasing function f , $f(X)$ dominates $f(Y)$ in the first order.

A.1 Proof of Lemma 1

The welfare function can be written as

$$\begin{aligned} W(\underline{r}, \bar{r}) &= \int_u \int_m l(\max\{\underline{r}, \min\{\bar{r}, u - m\}\} - u) dF_m(m|u) dF_u(u) \\ &= \int_u \left\{ \int_0^{u-\bar{r}} l(\bar{r} - u) dF_m(m|u) + \int_{u-\bar{r}}^{u-\underline{r}} l(-m) dF_m(m|u) + \int_{u-\underline{r}}^\infty l(\underline{r} - u) dF(m|u) \right\} dF_u(u) \end{aligned}$$

Accordingly, by the Leibniz rule,

$$\begin{aligned} \frac{dW}{d\bar{r}}(\underline{r}, \bar{r}) &= \int_u \int_{m \leq u-\bar{r}} l'(\bar{r} - u) dF_m(m|u) dF_u(u) \\ &= \int_u l'(\bar{r} - u) P(m \leq u - \bar{r}|u) dF_u(u) \end{aligned}$$

If $u < \bar{r}$, then $P(m \leq u - \bar{r}|u) \leq P(m < 0) = 0$. Moreover, for $u \geq \bar{r}$, we have $l'(\bar{r} - u) \geq 0$. Accordingly the previous expression is always positive, and thus the Choice Architect does not impose a binding upper bound \bar{r} .

A.2 Proof of Proposition 1

For parts (i) and (ii) we use the following fact. By Lemma 1, the Choice Architect imposes no upper bound. Hence, the welfare function is given by

$$\begin{aligned} W(\underline{r}) &= \int l(\max\{\underline{r}, u - m\} - u) dF(m, u) \\ &= \int_u \int_m l(\max\{\underline{r}, u - m\} - u) dF_m(m|u) dF(u) \end{aligned}$$

- (i) *Relation to m^A .* Let G be a cumulative distribution function over m and u . We let $\underline{r}^*(F)$ and $\underline{r}^*(G)$ denote the optimal mandates under measures F and G , and we let P_F and P_G denote the probability measures induced by F and G , respectively. Assume that $G_u(\cdot) = F_u(\cdot)$, and that for each u , $G_m(\cdot|u)$ dominates $F_m(\cdot|u)$ in the first order. We show that $\underline{r}^*(G) \geq \underline{r}^*(F)$. We write

$$W(\underline{r}; F) = \int_u \left\{ \int_{\{m \geq u-\underline{r}\}} l(\underline{r} - u) dF_m(m|u) + \int_{\{m < u-\underline{r}\}} l(-m) dF_m(m|u) \right\} dF_u(u).$$

Hence, using the Leibniz rule, we get

$$\begin{aligned}\frac{dW(\underline{r}; F)}{d\underline{r}} &= \int_u \left\{ \int_{\{m \geq u - \underline{r}\}} l'(r - u) dF_m(m|u) \right\} dF_u(u) \\ &= \int_u l'(r - u) P_F(m \geq u - \underline{r}|u) dF_u(u).\end{aligned}$$

By assumption, $P_F(m \geq 0) = P_G(m \geq 0) = 1$. Hence, for all $u < \underline{r}$, $P_F(m \geq u - \underline{r}|u) = P_G(m \geq u - \underline{r}|u) = 1$. Moreover, by the stochastic dominance assumption, for all $u \geq \underline{r}$, $P_G(m \geq u - \underline{r}|u) \geq P_F(m \geq u - \underline{r}|u)$. Accordingly, using that $F_u(\cdot) = G_u(\cdot)$, we get

$$\begin{aligned}\frac{dW(\underline{r}; F)}{d\underline{r}} - \frac{dW(\underline{r}; G)}{d\underline{r}} &= \int_u l'(r - u) [P_F(m \geq u - \underline{r}|u) - P_G(m \geq u - \underline{r}|u)] dF_u(u) \\ &= \int_{\{u \geq \underline{r}\}} l'(r - u) [P_F(m \geq u - \underline{r}|u) - P_G(m \geq u - \underline{r}|u)] dF_u(u) \\ &\leq 0\end{aligned}$$

where we use that $l'(z) \geq 0$ for $z \leq 0$. Therefore, by Topkis' monotone selection theorem, $\underline{r}^*(F) \leq \underline{r}^*(G)$, as was to be shown.

Relation to c^A . Consider choices $c_1^A > c_2^A$. By Assumption 2, the distribution of mistakes of Choice Architects who choose c_2^A , $G_{m^A}(\cdot|c_2^A)$, first-order stochastically dominates the distribution of mistakes of Choice Architects who choose c_1^A , $G_{m^A}(\cdot|c_1^A)$. As shown above, a mistake-projective paternalist's optimal mandate is increasing in her own mistake. The claim follows due to the preservation of first-order dominance relationships under monotonic transformations.

- (ii) *Relation to u^A .* By assumption, for a mistakes-projective Choice Architect, an increase in u^A increases the conditional distributions $F_u(\cdot|m)$ in the sense of first-order dominance, and leaves the marginal distribution $F_m(\cdot)$ unchanged. Hence, we consider two Choice Architects with conditional belief distributions $F_u(\cdot|m)$ and $\tilde{F}_u(\cdot|m)$, respectively, such that $\tilde{F}_u(\cdot|m)$ dominates $F_u(\cdot|m)$ in the first order. We will show that the second belief distribution implies a higher optimal mandate \underline{r}^* .

For $\theta \in [0, 1]$ define $F_u^\theta(\cdot|m) = (1 - \theta)F_u(\cdot|m) + \theta\tilde{F}_u(\cdot|m)$. Given beliefs $F_u^\theta(\cdot|m)$, the Choice Architect's objective function equals

$$W(\underline{r}, \theta) = \int_m \left[\int_0^{\underline{r}+m} l(\underline{r} - v) dF_u^\theta(v|m) + \int_{\underline{r}+m}^\infty l(-m) dF_u^\theta(v|m) \right] dF_m(m) \quad (2)$$

Next, we express the above integral as a function of $F_u(\cdot|m)$ instead of $F_u^\theta(\cdot|m)$. We define, for all u ,

$$w(u, \theta) = (F_u^\theta)^{-1}(F_u(u|m)|m),$$

where $(F_u^\theta)^{-1}(\cdot|m)$ is the inverse function of $F_u^\theta(\cdot|m)$. By the assumption that all $F_u(\cdot|m)$ have the same support, this expression is well-defined. Observe that $w(0, \theta) = 0$ and $w(\infty, \theta) = \infty$. Moreover,

$$\frac{\partial w(u, \theta)}{\partial u} = \frac{f_u(u|m)}{f_u^\theta((F_u^\theta(\cdot|m))^{-1}(F_u(u|m))|m)} = \frac{f_u(u|m)}{f_u^\theta(w(u, \theta)|m)},$$

where $f_u^\theta(\cdot|m)$ and $f_u(\cdot|m)$ are the densities of $F_u^\theta(\cdot|m)$ and $F_u(\cdot|m)$, respectively.

Expressed using density functions, equation (2) reads as

$$W(\underline{r}, \theta) = \int_m \left[\int_0^{\underline{r}+m} l(\underline{r} - v) f_u^\theta(v|m) dv + \int_{\underline{r}+m}^\infty l(-m) f_u^\theta(v|m) dv \right] dF_m(m)$$

We now apply the substitution $v = w(u, \theta)$ in the inner integrals of the above expression. We let $w^{-1}(\cdot, \theta)$ denote the inverse of $w(\cdot, \theta)$ with respect to the first argument. This yields

$$\begin{aligned} W(\underline{r}, \theta) &= \int_m \left[\int_{w^{-1}(0, \theta)}^{w^{-1}(\underline{r}+m, \theta)} l(\underline{r} - w(u, \theta)) \frac{\partial w(u, \theta)}{\partial u} f_u^\theta(w(u, \theta)|m) du \right. \\ &\quad \left. + \int_{w^{-1}(\underline{r}+m, \theta)}^{w^{-1}(\infty, \theta)} l(-m) \frac{\partial w(u, \theta)}{\partial u} f_u^\theta(w(u, \theta)|m) du \right] dF_m(m) \\ &= \int_m \left[\int_0^{w^{-1}(\underline{r}+m, \theta)} l(\underline{r} - w(u, \theta)) \frac{f_u(u)}{f_u^\theta(w(u, \theta))} f_u^\theta(w(u, \theta)|m) du \right. \\ &\quad \left. + \int_{w^{-1}(\underline{r}+m, \theta)}^\infty l(-m) \frac{f_u(u)}{f_u^\theta(w(u, \theta))} f_u^\theta(w(u, \theta)|m) du \right] dF_m(m) \\ &= \int_m \left[\int_0^{w^{-1}(\underline{r}+m, \theta)} l(\underline{r} - w(u, \theta)) f_u(u) du + \int_{w^{-1}(\underline{r}+m, \theta)}^\infty l(-m) f_u(u) du \right] dF_m(m) \\ &= \int_m \left[\int_0^{w^{-1}(\underline{r}+m, \theta)} l(\underline{r} - w(u, \theta)) dF_u(u|m) + \int_{w^{-1}(\underline{r}+m, \theta)}^\infty l(-m) dF_u(u|m) \right] dF_m(m) \end{aligned}$$

By the Leibniz integral rule, the derivative of $W(\underline{r}, \theta)$ regarding the mandate \underline{r} thus takes the following form (the derivatives regarding the integral bounds mutually cancel).

$$\frac{dW(\underline{r}; \theta)}{d\underline{r}} = \int_m \left[\int_0^{w^{-1}(\underline{r}+m, \theta)} l'(\underline{r} - w(u, \theta)) dF_u(u|m) \right] dF_m(m).$$

Moreover, the cross-derivative of (2) is given by

$$\begin{aligned} \frac{d^2 W(\underline{r}; F)}{d\theta d\underline{r}} &= \int_m \left[l'(-m) f_u(w^{-1}(\underline{r}+m, \theta)|m) \frac{\partial w^{-1}(\underline{r}+m, \theta)}{\partial \theta} \right. \\ &\quad \left. + \int_0^{w^{-1}(\underline{r}+m, \theta)} \left(-l''(\underline{r} - w(u, \theta)) \frac{\partial w^{-1}(u, \theta)}{\partial \theta} \right) dF_u(u|m) \right] dF_m(m). \end{aligned}$$

To sign the foregoing expression, observe that, due to $m > 0$, we have $l'(-m) > 0$. Further, $-l''(\underline{r} - w(u, \theta)) > 0$ because $l'' < 0$ by assumption, and $f_u(w^{-1}(\underline{r} + m, \theta)|m) \geq 0$ by the definition of a probability density function. It remains to be shown that $\frac{\partial w^{-1}(u, \theta)}{\partial \theta} \geq 0$ for any u , as we do below. Using that fact, we obtain $\frac{d^2 W(\underline{r}; F)}{d\theta d\underline{r}} > 0$. Therefore, by the fundamental theorem of calculus, we have $\frac{dW(\underline{r}; \tilde{F})}{d\underline{r}} \geq \frac{dW(\underline{r}; F)}{d\underline{r}}$. Hence, the Choice Architect's objective function has increasing differences. By Topkis' monotone selection theorem, the optimal intervention \underline{r}^* is thus an increasing function of u^A , as needed.

To sign $\frac{\partial w^{-1}(u, \theta)}{\partial \theta}$, we derive $\frac{\partial w(u, \theta)}{\partial \theta}$, which has the same sign. For ease of notation we suppress the conditioning of $F^\theta(\cdot|m)$ on m . By construction, we have $\frac{\partial w(u, \theta)}{\partial \theta} = \frac{\partial}{\partial \theta}(F_u^\theta)^{-1}(F_u(u))$. To derive $\frac{\partial}{\partial \theta}(F_u^\theta)^{-1}$, observe that, by the definition of an inverse function, we have $(F^\theta)^{-1}(F^\theta(u)) = u$. Using $s \in [0, 1]$ to denote the argument of $(F^\theta)^{-1}$, we differentiate both sides of that identity with respect to θ . Upon rearranging, we obtain

$$\frac{\partial (F^\theta)^{-1}}{\partial \theta}(F^\theta(u)) = - \left. \frac{\partial (F^\theta)^{-1}(s)}{\partial s} \right|_{s=F^\theta(u)} \cdot \frac{\partial F^\theta(u)}{\partial \theta}.$$

Writing $s = F^\theta(u)$, we see that for all s we have

$$\frac{\partial (F^\theta)^{-1}(s)}{\partial \theta} = - \frac{\partial (F^\theta(s))^{-1}}{\partial s} \cdot \frac{\partial F^\theta((F^\theta)^{-1}(s))}{\partial \theta}.$$

Because F^θ is strictly increasing, so is $(F^\theta)^{-1}$, and thus $\frac{\partial (F^\theta)^{-1}}{\partial s} > 0$. Moreover, $\frac{\partial F^\theta(u)}{\partial \theta} = \tilde{F}(u) - F(u)$. This expression is non-positive because $\tilde{F}(u)$ dominates $F(u)$ in the first order. Accordingly, for all s , we have $\frac{\partial (F^\theta)^{-1}(s)}{\partial \theta} \geq 0$. Therefore, for all u , we have $\frac{\partial w_m^\theta(u)}{\partial \theta} \geq 0$, as needed.

Relation to c^A . Consider choices $c_1^A > c_2^A$. By Assumption 2, the belief about the distribution of ideals by Choice Architects who choose c_1^A , $G_{u^A}(\cdot|c_1^A)$, dominates belief about the distribution of ideals by Choice Architects who choose c_2 , $G_{u^A}(\cdot|c_2^A)$. As shown above, an ideals-projective paternalist's optimal mandate is increasing in her own ideal. The claim follows due to the preservation of first-order dominance relationships under monotonic transformations.

(iii) This is true because the objective function is independent of the Choice Architect's type. □

A.3 Proof of Proposition 2

In this proof, we first show the comparative statics with respect to m^A and u^A . The statements regarding the relation between ΔW and \underline{r}^* , as well as the relation between ΔW and c^A , then follow as explained in the main text. In the remainder of this proof, we use the notation θ to denote m^A if the Choice Architect is a mistakes-projective paternalist, and u^A if she is an ideals-projective paternalist. Moreover, observe

that by the assumption that $P(u - m < \underline{r}^*) > 0$, the optimal mandate \underline{r}^* must either be interior, or $\underline{r}^* = \bar{c}$.

(i) For a mistakes-projective paternalist, we write

$$W(\underline{r}^*(\theta), \bar{c}) - W(\underline{c}, \bar{c}) = \int_u \left[\int_{u - \underline{r}^*(\theta)}^{\infty} (l(\underline{r}^*(\theta) - u) - l(-m)) dF_m^\theta(m|u) \right] dF_u^\theta(u)$$

A mistakes-projective paternalist will impose a higher mandate if she has higher beliefs about mistakes. The expression $-l(-m)$ is increasing in m . Because the increase in θ leads to an increase in $F_m^\theta(\cdot|u)$ for all u , the inner integral increases for all u . Because the marginal distribution $F_m^\theta(u)$ is independent of θ , the $\Delta W(r)$ is thus increasing in θ for any r . If $\underline{r}^* = \bar{c}$, it follows directly that $\Delta W(\underline{r}^*(\theta))$ is increasing in θ . Otherwise, the same conclusion follows by the envelope theorem.

(ii) For an ideals-projective paternalist we write

$$\begin{aligned} W(r) - W(\underline{c}) &= \int_m \left[\int_0^r (l(r - u) - l(-m)) dF_u^\theta(u|m) \right. \\ &\quad \left. + \int_r^{r+m} (l(r - u) - l(-m)) dF_u^\theta(u|m) \right] dF_m^\theta(m) \end{aligned}$$

The first term in brackets corresponds to the welfare of Choosers who are harmed by the mandate r , the second term in brackets corresponds to the welfare of Choosers who are helped. The expression suggests that an increase in $F_u^\theta(\cdot|m)$ may both increase or decrease the overall integral.

We verify numerically that the overall effect may take either sign. We consider the example $m \sim U(0, 10)$ and $u \sim U(0, 20)$, with u independent of m . First, we replace u by $u' \sim U(5, 20)$, which dominates u in the first order. In this case, the welfare increase from imposing the optimal mandate (compared to no mandate) is larger if ideals are given by u' than if they are given by u . Second, we replace u by $u'' \sim U(0, 25)$, which dominates u in the first order. Numerical verification shows that the welfare increase from imposing the optimal mandate (compared to no mandate) is smaller if ideals are given by u'' than if they are given by u . \square

A.4 Proof of Corollary 1

(i) The case of the conventional behavioral welfarist is trivial. For mistakes-projective paternalists, the welfare associated with surrogate choice s is

$$W(s) = \int l(s - u) dF(m, u) = \int_u \int_m l(s - u) dF_m(m|u) dF_u(u) = \int_u l(s - u) dF_u(u)$$

which is independent of the conditional distribution $F_m(\cdot|u)$.

(ii) For ideals-projective paternalists, we write

$$W(s) = \int l(s - u) dF(m, u) = \int_m \int_u l(s - u) dF_u(u|m) dF_m(m)$$

Accordingly,

$$W'(s) = \int_m \int_u l'(s - u) dF_u(u|m) dF_m(m)$$

Because $l'(s - u)$ is increasing in u , an increase in $F_u(\cdot|m)$ increases $W'(s)$. Therefore, the Choice Architect's objective function has increasing differences, and hence the result follows by Topkis' monotone selection theorem.

A.5 Proof of Proposition 3

To show that both mistakes-projective and ideals-projective paternalists display the false consensus effect consider the following two cases. First, by Assumption 2, higher choices by a mistakes-projective paternalist imply lower own mistakes. By definition of mistakes-projective paternalism these imply lower beliefs about Choosers' mistakes m , and do not affect beliefs about Choosers' ideals u . Hence, the mistakes-projective paternalist has higher beliefs about Choosers' unrestricted choices $c = u - m$. Second, by Assumption 2, higher choices by an ideals-projective paternalist imply higher own ideals. By definition of ideals-projective paternalism these imply higher beliefs about Choosers' ideals u , and do not affect beliefs about Choosers' mistakes m . Hence, the ideals-projective paternalist has higher beliefs about Choosers' unrestricted choices $c = u - m$.

- (i) By definition, a mistakes-projective paternalist's beliefs about the distribution of ideals u are independent of her own choices, so that variation in predictions directly reveal variation in beliefs about the distribution of mistakes m . An increase in predictions Q corresponds to a decrease in the beliefs about mistake, which, by Proposition 1, and the fact that first-order dominance is robust to monotonic transformations, implies a decrease in the optimal mandate \underline{r}^* .
- (ii) By definition, an ideals-projective paternalist's beliefs about the distribution of mistakes m are independent of her own choices, so that variation in predictions directly reveal beliefs about variation in the distribution of ideals u . An increase in predictions Q corresponds to an increase in the beliefs about ideals, which, by Proposition 1, and the fact that first-order dominance is robust to monotonic transformations, implies an increase in the optimal mandate \underline{r}^* . □

B Additional Analysis

B.1 Communication

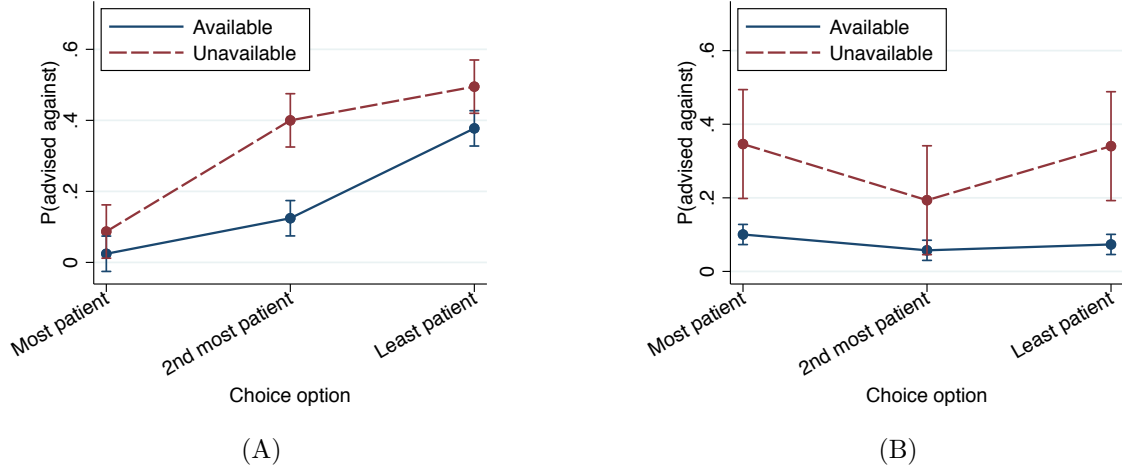


Figure A1: Recommendations against ranking an option highly. Panel A: Main condition. Panel B: Induced Chooser Preferences condition. Whiskers indicate 95% confidence intervals, clustered by subjects.

Subjects make infrequent use of the opportunity to write open-ended messages to the Chooser. 21.45% of subjects write at least 5 characters in at least one of the rounds in Stage 1 of the laboratory part. This subset of subjects writes a message in 17.58% of all rounds, on average.¹

Subjects more frequently make use of the option to advise against choice options by the click of a button. Figure A1 displays the fraction of times subjects recommend against specific options. Panel A displays the data for the Main condition, Panel B those for the Induced Chooser Preferences condition. Three features stand out. First, in the Main condition, subjects are substantially more likely to recommend against impatient options than against patient options. Second recommendations in the Induced Chooser Preferences condition do not significantly depend on the characteristics of the options. Third, in both conditions, subjects are substantially more likely to advise against options they remove than to advise against options they make available. Communication appears to be a complement to paternalistic interventions rather than a substitute—as if Choice Architects wanted to provide justification for removing options.

B.2 Beliefs about reasons for impatient choice

Here, we examine subjects’ responses to survey questions regarding the reasons for choosing impatiently, asked in Stage 3.2 of the experiment (see Table A10). Table A1 displays the results. It lists the six

¹Including also subjects in the Choice Distribution Information condition, we find that the fraction of subjects who ever write a message is 19.85%.

possible reasons presented to Choice Architects for why a Chooser may choose €4 today and €0 in half a year over €0 today and €10 in half a year.

| | (1) | (2) | (3) | (4) |
|---|----------------------|------------------------------------|----------------------|--------------------|
| | Mean response | Regression with dependent variable | | |
| | | Min. € Chooser must take late | Welfare belief | |
| | | | non-inc. | -CV |
| Objectives | | | | |
| <i>They are generally rather impatient.</i> | 0.640*** (0.056) | 0.206 (0.221) | 0.032 (0.031) | -0.004 (0.015) |
| <i>They have an urgent need for money to pay for things like food or rent.</i> | 0.782*** (0.069) | -0.413** (0.202) | -0.003 (0.024) | -0.016 (0.014) |
| Implementation | | | | |
| <i>They did not pay attention and chose randomly.</i> | -0.436*** (0.059) | 0.030 (0.252) | -0.053* (0.031) | -0.010 (0.016) |
| <i>They meant to choose €0 today, €10 in half a year, but chose something else because some irrelevant event prevented them from choosing what they actually meant to choose (e.g. their hand trembled, or they confused the order of the radio-buttons).</i> | -1.360*** (0.053) | -0.184 (0.249) | -0.015 (0.032) | -0.020 (0.018) |
| Experiment-related factors | | | | |
| <i>They are not sure whether the experimenter will really pay them half a year from now.</i> | -0.838*** (0.064) | 0.147 (0.237) | 0.052* (0.027) | 0.041** (0.017) |
| <i>They are not sure whether they will be able to receive the money in half a year from now, for instance because they no longer have a PayPal account.</i> | -0.667*** (0.062) | -0.474* (0.252) | -0.081*** (0.029) | -0.011 (0.019) |
| Observations | 303 | 1,212 | 1,212 | 1,093 |
| Subjects | 303 | 303 | 303 | 290 |

Table A1: Non-incentivized assessment of the plausibility of particular reasons for impatience. Subjects were asked to suppose that a future experiment participant chooses €4 today and €0 in half a year over €0 today and €10 in half a year, and were asked to indicate how likely they think that each of the reasons listed motivated the participant’s choice. Responses are given on the scale *extremely unlikely, unlikely, possible, likely, extremely likely*, encoded as -2, -1, 0, 1, 2, respectively. Column 1 displays the mean responses for each item. Columns 2 - 4 each display the coefficients of a regression of the variable in the first row on the items.

Choice Architects provide judgments on a scale from -2 to 2. Column 1 lists the mean responses. Choice Architects believe that impatience as a personality trait and liquidity constraints are plausible explanations, with significantly positive mean scores of 0.640 and 0.782, respectively. Choice Architects on average consider the other reasons relatively unlikely. Choice Architects do not consider inattention and random choice plausible reasons. They consider the inability to implement one’s objectives downright

implausible. Neither do Choice Architects believe that impatient choices are due to experiment-specific factors such as trust in the experimenter or technical issues with the monetary transaction.

Column 2 studies how these beliefs affect interventions. It regresses mandates on Choice Architects' assessment of the plausibility of the six reasons. Choice Architects are unwilling to intervene if they believe impatient choices are due to factors external to the Chooser, such as liquidity constraints and transaction costs. The remaining factors are not statistically significantly different from zero. We do note, however, that beliefs that impatient choices are due to an impatient personality lead, if anything, to more stringent interventions. This contrasts with standard economic theory that regards idiosyncratic preference variation as normatively valid. If anything, standard theory would approve of interventions only to the extent they aid patient individuals avoid choice mistakes, but not to make impatient people choose more patiently.

Columns 3 and 4 show Choice Architects' beliefs whether an exogenous removal of the least patient or least patient two options in an opportunity set furthers the Chooser's own good. Two correlations stand out. First, Choice Architects believe that such a removal hurts Choosers if the reason for impatient choice consists of transactional difficulties with receiving late payments. Second, Choice Architects believe that Choosers who choose impatiently because they do not trust they would receive the late payment are mistaken, and that an exogenous removal of the least patient option(s) would therefore further their own good.

B.3 Attention test

Table A2 displays the attention test administered in Stage 2.2 of the experiment (see Table A10). For each statement, the subject indicates whether it is true or false. The table also lists the percentage of correct responses next to each statement. The mean test score is 6.40 out of 8, with a standard deviation of 1.23. The lowest performance is on question 5, which was answered correctly by 58% of participants. The question concerns front-end delay, which was present in just two out of the 25 rounds that constitute stages 1 and 2.1 of the experiment. While some subjects might not have remembered these questions in this test, the fact that the introduction of a front-end delay leads to significant behavioral differences suggests they did pay attention.

B.4 Choosers' choices

Table A3 lists the choices by Choosers. Each Chooser ranked the three options associated with single round of the experiment. Choosers participate merely to make the Choice Architects' decisions incentive-compatible; their sessions are not designed to conduct any type of inference. Accordingly, we did not record any data other than those required to determine each Chooser's payment.

-
1. In some rounds I could remove options, but I could never add options for the future experiment participant. (False, 85%)
 2. For all options which the future experiment participant could receive, the early payment will always be on the day of the experiment. (False, 60%)
 3. For some options that the future experiment participant could have received, the late payment will occur up to 7 months after the day of the study. (False, 86%)
 4. In some rounds, I had to make a single option available to the future experiment participant; I could not make multiple options available, even if I wanted to. (True, 77%)
 5. Some rounds concerned gold tokens and silver tokens. These rounds only concerned money that would be paid soon after the experiment, not money that would be paid only months after the experiment. (True, 58%)
 6. Other experiment participants could receive €0.40, €0.50, or €0.60 per silver token, each with the same probability. (False, 98%)
 7. In some lines of the decision lists, the base payment of the future participant could be increased. In other rounds it could be decreased. (True, 93%)
 8. If I made some options unavailable, this means that the other experiment participant cannot see that option, and therefore does not need to think about these options. (False, 83%)
-

Table A2: Attention test concerning decisions made for Choosers. Fractions of correct answers are given in parentheses.

| | Preference rank | | | Availability |
|-----------------------------|-----------------|--------|--------|--------------|
| | First | Second | Third | |
| <i>Most Patient Choice</i> | | | | |
| Money over time | 79.61% | 11.65% | 8.74% | 94.17% |
| | (82) | (12) | (9) | |
| Induced preferences | 57.14% | 23.81% | 19.05% | 42.86% |
| | (12) | (5) | (4) | |
| <i>Middle Choice</i> | | | | |
| Money over time | 5.83% | 5.83% | 88.35% | 26.19% |
| | (15) | (85) | (3) | |
| Induced preferences | 23.81% | 71.43% | 4.76% | 11.9% |
| | (5) | (15) | (1) | |
| <i>Least Patient Choice</i> | | | | |
| Money over time | 5.83% | 5.83% | 88.35% | 16.07% |
| | (6) | (6) | (91) | |
| Induced preferences | 19.05% | 4.76% | 76.19% | 4.76% |
| | (4) | (1) | (16) | |

Table A3: Choosers' choices. Numbers in parentheses represent the number of Choosers making each choice. *Money over time* concerns choices in the Main, Exogenous Restriction, and Chooser Information conditions.

| Option menus | Percent unavailable | | | Observations | Subjects |
|--------------|---------------------|---------------|----------------------|--------------|----------|
| | Most patient option | Middle option | Least patient option | | |
| 1, 2, 3, 4 | 5.1 (1.0) | 11.5 (1.4) | 33.0 (2.1) | 1212 | 303 |
| 1 | 6.0 (1.9) | 9.3 (2.4) | 32.0 (3.8) | 150 | 150 |
| 2 | 5.2 (1.8) | 14.4 (2.8) | 23.5 (3.4) | 153 | 153 |
| 3 | 4.3 (1.2) | 8.3 (1.6) | 38.9 (2.8) | 303 | 303 |
| 4 | 5.3 (1.3) | 14.5 (2.0) | 31.4 (2.7) | 303 | 303 |

Table A4: Fraction of options removed in Main condition. Numbers in parentheses indicate the standard error of the mean, clustered by subject. Decisions with front-end delay are excluded.

B.5 Prevention rates by option menu

Table A4 reports the removal rates for the Main treatment. The first row corresponds to the figure; the remaining four rows show these frequencies separately for each option menu. Choice Architects consistently remove less patient options more frequently than more patient ones.

The variation in removal frequencies across rounds is well-explained by differences in the costs of impatience, as we show next. We focus on the price of choosing a less patient option within each option menu. We define that price as the amount of future Euros a Chooser would gain if she decreased his current payment by €1. For the most patient option, we normalize that price to 1. Formally, letting y_i^s is the amount of money that option i in option menu s pays late and x_i^s is the amount of money it pays early, we define the price of impatience for option C in option menu s as $p_C^s = -\frac{y_C^s - y_B^s}{x_C^s - x_B^s}$ and that of option B as $p_B^s = -\frac{y_B^s - y_A^s}{x_B^s - x_A^s}$. We normalize the price of option A to 1. Across all option menus, the price of increasing the present payout by €1 varies between 1.5 and 3 when comparing the most patient option to the middle option, and between 2.67 and 5 when comparing the middle option to the least patient option. Figure A2 shows the prevention rate as a function of the price of impatient choice within each option menu. We find an approximately linear relation. The R^2 coefficient corresponding to the graph is 93.2%. After including an indicator for whether an option is the least patient within an option menu, the R^2 coefficient rises to 98.0%.

B.6 Choice Architects' own choices

In Stage 2.4 of the experiment (see Table A10), Choice Architects choose one of the options from each option menu in Panel A of Table 1 (see Appendix Section D.1). Table A5 lists the distribution of these

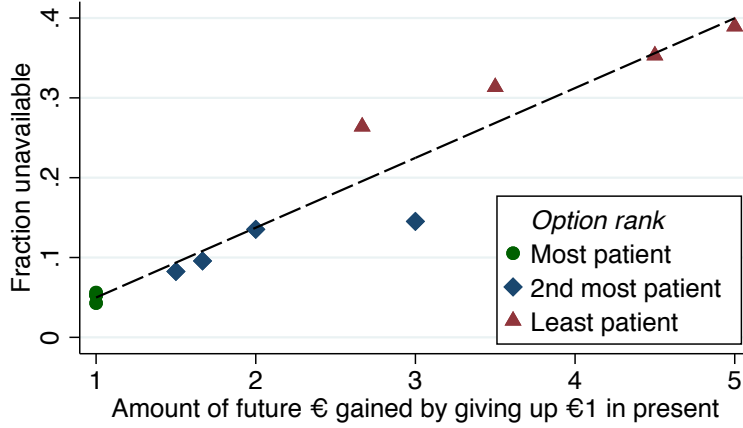


Figure A2: Frequency of removals of each option, by the benefit of one less €1 in current payments, measured in future payments, at that option (normalized to €1 for option *A* in each option menu).

choices as they concern money over time. In addition, the table lists the fraction of Choice Architects who remove an option for the Chooser given that they select this option for themselves.

| Option menus | Percent chosen | | | Prevented if chosen | | | Obs. | Subjects |
|----------------------------|----------------|---------------|---------------|---------------------|---------------|---------------|------|----------|
| | Option 1 | Option 2 | Option 3 | Option 1 | Option 2 | Option 3 | | |
| 1, 2, 3, 4 | 78.3 (1.7) | 13.0 (1.2) | 8.4 (1.2) | 3.0 (0.7) | 4.8 (1.5) | 5.9 (2.0) | 1612 | 403 |
| 1 | 68.7 (3.3) | 18.5 (2.8) | 12.3 (2.4) | 6.0 (2.1) | 2.8 (2.8) | 0.0 (0.0) | 195 | 195 |
| 2 | 77.9 (2.9) | 9.6 (2.0) | 12.5 (2.3) | 1.9 (1.1) | 5.0 (5.0) | 11.5 (6.4) | 208 | 208 |
| 3 | 70.7 (2.3) | 23.1 (2.1) | 6.0 (1.2) | 2.5 (0.9) | 3.2 (1.8) | 4.2 (4.2) | 403 | 403 |
| 4 | 87.6 (1.6) | 4.7 (1.1) | 7.4 (1.3) | 2.5 (0.8) | 10.5 (7.2) | 0.0 (0.0) | 403 | 403 |
| 1, 2 Front-end delay | 81.4 (1.9) | 10.4 (1.5) | 7.9 (1.3) | 3.4 (1.0) | 7.1 (4.0) | 12.5 (5.9) | 403 | 403 |
| 1, 2 No front-end delay | 73.4 (2.2) | 13.9 (1.7) | 12.4 (1.6) | 3.7 (1.1) | 3.6 (2.5) | 6.0 (3.4) | 403 | 403 |

Table A5: Choices that Choice Architects make for themselves in each option menu of the Main condition. Option 1 is most patient, followed by options 2 and 3, respectively.

B.7 Judgments about welfare effects of real-world policies

Table A6 replicates Table 9 using judgments about the welfare implications instead of policy support as dependent variable. The variables *Smoker yes / no* and *Cigarettes / day* are highly statistically significant if only one of them is included in the regression, but they lose significance once both are included simultaneously.

Table A7 shows that statements of support are significantly positively related to judgments about the welfare effect of real-world paternalistic policies. The one exception is the case of restrictions on short-term, high-interest lending. For that policy, we find a non-monotonicity once levels of support exceed 3. However, that association is statistically much weaker than the positive relation found amongst lower levels of support for that policy.

B.8 Behavior by performance on memory check

Here, we report our main findings regarding projective paternalism on the subsample of Choice Architects who were unable to reproduce their intertemporal choices from the Online part of the experiment. Observe that a Choice Architect may be able to reproduce their choice for two reasons. First, they may actually memorize their choice from the Online part. Second, they may apply the same choice procedure to the reproduction stage than they applied in the Online part. The second mechanism causes a coincidence of original and reproduced choices even if the Choice Architect does not remember the original choices. Further, observe that the pairs of early and late amounts in the decision lists were (2, 10), (5, 10), (8, 10). Choice Architects were asked to reproduce their choices for the lists corresponding to (2, 10) and (5, 10). 60.1% of all subjects chose the delayed option on each line on the list (31.5% chose that way in all three decision lists). We find that 46.9% of subjects correctly reproduced their responses in both decision lists they were asked about. 90.4% of them had chosen the delayed option on each line in the list. With such extreme choices, both memorization and reconstruction are easier.

As a robustness check of our main results concerning projective paternalism, Table A8 reproduces Table 4 using only subjects who failed to reproduce at least one of their choices from the Online component. In spite of the significantly smaller sample, both the estimates and their statistical significance are not materially changed. The exception is the effect of the Choice Architect's patience percentile in column (7), which, in spite of a largely unchanged magnitude, is no longer statistically significant.

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
|--|----------------------|----------------------|----------------------|----------------------------|--|----------------------|----------------------|----------------------|----------------------|----------------------|
| Judgment about welfare effect | Increase alcohol tax | Increase alcohol tax | Increase tobacco tax | Increase sugary drinks tax | Tighten restrictions on short-term lending | | | | | |
| Alcohol consumption | | | | | | | | | | |
| <i>Alcohol units / week</i> | -0.038 (0.024) | -0.039 (0.025) | | | | | | | | |
| <i>log(days binge drinking / year)</i> | -0.111*** (0.042) | -0.105** (0.044) | | | | | | | | |
| Tobacco consumption | | | | | | | | | | |
| <i>Smoker yes / no</i> | | | -0.502*** (0.135) | -0.509*** (0.139) | | | | | | |
| <i>Cigarettes / day</i> | | | | | -0.064*** (0.019) | -0.063*** (0.019) | | | | |
| Body Mass Index | | | | | | | -0.033 (0.022) | -0.032 (0.023) | | |
| Debt | | | | | | | | | -0.609*** (0.180) | -0.617*** (0.189) |
| <i>Credit card debt (in €1,000)</i> | | | | | | | | | 0.572 (0.376) | 0.574 (0.384) |
| <i>Other short-term debt yes / no</i> | | | | | | | | | | |
| Male | | | | | | | | | | |
| | | | | -0.016 (0.115) | | -0.070 (0.111) | | | | 0.128 (0.120) |
| Age | | | | 0.008 (0.011) | | -0.012 (0.009) | | | | 0.009 (0.015) |
| Monthly expenses (in €1,000) | | | | -0.000 (0.144) | | -0.139 (0.127) | | | | -0.107 (0.172) |
| Political orientation | | | | 0.014 (0.050) | | 0.037 (0.054) | | | | 0.041 (0.067) |
| Cut 1 | -2.058*** (0.193) | -1.834*** (0.329) | -1.879*** (0.229) | -2.327*** (0.321) | -1.880*** (0.231) | -2.297*** (0.324) | -2.523*** (0.549) | -2.640*** (0.596) | -1.193*** (0.458) | -0.987* (0.565) |
| Cut 2 | -1.135*** (0.174) | -0.907*** (0.320) | -1.239*** (0.215) | -1.684*** (0.315) | -1.240*** (0.217) | -1.655*** (0.316) | -1.749*** (0.544) | -1.749*** (0.588) | -0.085 (0.442) | 0.122 (0.554) |
| Cut 3 | -0.510*** (0.170) | -0.281 (0.316) | -0.623*** (0.210) | -1.065*** (0.306) | -0.625*** (0.211) | -1.037*** (0.308) | -0.774 (0.542) | -0.881 (0.585) | 0.821* (0.444) | 1.030* (0.557) |
| Cut 4 | 0.396** (0.172) | 0.623** (0.315) | 0.175 (0.208) | -0.260 (0.302) | 0.170 (0.210) | -0.236 (0.304) | 0.253 (0.543) | 0.155 (0.585) | 1.902*** (0.459) | 2.115*** (0.565) |
| Observations | 403 | 403 | 403 | 403 | 403 | 403 | 398 | 398 | 351 | 351 |

Table A6: Judgments about the welfare effect real-world paternalistic policies and respondent characteristics. Each column shows a separate ordered probit regression. Judgments are measured as *People in Switzerland would be ... significantly worse off; a little worse off; neither better nor worse off; a little better off; significantly better off*. Regarding alcohol, the question concerns *adolescents or young adults in Switzerland*. Regarding loan restriction, the question concerns *the average German*. Subject numbers in some columns fall short of 403 because some subjects refused to disclose personal characteristics. Binge drinking is defined as the consumption of at least 4 (females) or 5 (males) units of alcohol within a period of two hours ([National Institutes on Alcohol Abuse and Alcoholism, 2018](#)). Subjects were asked about loosening restrictions on short-term lending. For easier comparability, reverse-coded values are shown (corresponding to tightening restrictions). All regressions include session fixed effects.

| Judgment about welfare effect | (1) Increase alcohol tax | (2) Increase tobacco tax | (3) Introduce sugary drinks tax | (4) Tighten restrictions on short-term lending |
|---|--------------------------------|--------------------------------|---------------------------------------|--|
| <i>Support level (baseline 1)</i> | | | | |
| 2 | 0.712*** (0.200) | 0.576*** (0.191) | 1.112*** (0.240) | 0.608** (0.289) |
| 3 | 1.748*** (0.220) | 0.796*** (0.194) | 2.232*** (0.224) | 1.892*** (0.301) |
| 4 | 2.812*** (0.285) | 1.248*** (0.219) | 2.936*** (0.248) | 1.732*** (0.313) |
| 5 | | | | 1.344*** (0.385) |
| Male | 0.040 (0.114) | 0.063 (0.111) | 0.236** (0.115) | 0.063 (0.110) |
| Age | 0.009 (0.010) | -0.022** (0.009) | -0.002 (0.011) | -0.005 (0.013) |
| Political orientation | 0.047 (0.052) | 0.044 (0.055) | 0.033 (0.058) | -0.022 (0.061) |
| Monthly expenses (in €1,0000) | -0.192 (0.155) | -0.185 (0.132) | -0.339* (0.184) | 0.009 (0.168) |
| Cut1 | -0.559* (0.335) | -1.771*** (0.340) | -0.592 (0.385) | -0.637 (0.449) |
| Cut2 | 0.613* (0.341) | -1.087*** (0.340) | 0.759** (0.373) | 0.583 (0.455) |
| Cut3 | 1.446*** (0.351) | -0.429 (0.335) | 1.974*** (0.382) | 1.699*** (0.463) |
| Cut4 | 2.696*** (0.377) | 0.404 (0.334) | 3.267*** (0.392) | 2.773*** (0.469) |
| <i>p-values comparing levels of support</i> | | | | |
| 2=3 | 0.000 | 0.097 | 0.000 | 0.000 |
| 2=4 | 0.000 | 0.000 | 0.000 | 0.000 |
| 3=4 | 0.000 | 0.004 | 0.000 | 0.193 |
| 2=5 | | | | 0.007 |
| 3=5 | | | | 0.035 |
| 4=5 | | | | 0.161 |
| Observations | 403 | 403 | 403 | 403 |

Table A7: Relation between expressions of support and judgments about welfare effects of real-world paternalistic policies. Each column shows a separate ordered probit regression. Judgments are measured as *People in Switzerland would be . . . significantly worse off; a little worse off; neither better nor worse off; a little better off; significantly better off*. Regarding alcohol, the question concerns *adolescents or young adults in Switzerland*. Regarding loan restriction, the question concerns *the average German*. Subjects were asked about loosening restrictions on short-term lending. For easier comparability, reverse-coded values are shown (corresponding to tightening restrictions). All regressions include session fixed effects.

| VARIABLES | (1) Min. € Chooser takes late | (2) Min. € Chooser takes late | (3) Libertarian | (4) Surrogate choice | (5) Surrogate choice | (6) Welfare belief non-inc. | (7) Welfare belief - CV |
|----------------------------------|--|--|--------------------|----------------------------|----------------------------|--------------------------------------|----------------------------------|
| Non-libertarian subjects only | Yes | | | Yes | | Yes | Yes |
| Patience %-ile | 3.378** (1.538) | 2.296** (1.025) | -0.111 (0.168) | 5.708*** (1.401) | 4.585*** (1.001) | 0.740** (0.318) | 0.181 (0.122) |
| Cut 1 | | | | | | -0.123 (0.426) | |
| Cut 2 | | | | | | 1.194*** (0.424) | |
| Mean of dep. var. | 5.880 (0.323) | 4.237 (0.256) | 0.390 (0.039) | 11.990 (0.375) | 12.130 (0.279) | — — | 0.039 (0.026) |
| Observations | 273 | 447 | 447 | 254 | 411 | 273 | 228 |
| Number of subjects | 91 | 149 | 149 | 91 | 149 | 91 | 86 |

Table A8: Replication of Table 4 using only subjects who failed to reproduce their choice for at least one of the two decision lists eliciting their patience in the online part they were asked to reproduce at the end of the experiment.

C Vignette experiment

C.1 Design

In order to study whether differential beliefs about the effectiveness of various interventions are the underlying mechanism in our results in Section 6, we conduct a vignette study on Amazon Mechanical Turk. Its structure is similar to the part of our main experiment concerning policy judgments. Appendix D.5 displays the full text of the vignette study.

In order to control beliefs about the effectiveness of the interventions, we describe a specific individual, ask subjects to assume that the policy will affect that individual in a precisely specified fashion, and ask what their support of the policy would be if all affected individuals were exactly like that individual. In addition, we elicit beliefs about the effectiveness of the policies on potentially heterogeneous members of the general population, permitting a test of whether effectiveness beliefs are related to respondent characteristics in a way that would artificially generate ideals-projective paternalism.

We use four policies, displayed to subjects in random order: Alcohol taxes, sugary drinks taxes, retirement savings mandates, and restrictions on short-term, high-interest lending.² For each policy we describe an individual living in an Anglo-Saxon country other than the US, so respondents' attitude to paying taxes themselves should not influence their responses. Moreover, we describe all taxes as budget-neutral. Regarding sugary drinks taxes, for instance, we employ the following language: *“Anne, [is] a resident of Melbourne, Australia. She is 35 years old, 5 feet and 4 inches tall, and she weighs 190 pounds. ... For this question, assume that if the tax is introduced, Anne will reduce her consumption of sugary drinks so that her weight permanently drops to 145 pounds (from the previous 190 pounds). Given Anne's height, this is a normal weight, according to the World Health Organization. If all residents of Melbourne were exactly like Anne, would you support or oppose the introduction of the tax?”*

After subjects provide their judgments, we also elicit respondents' own characteristics that allow for tests of mistakes-projective or ideals-projective paternalism for each of the policies. Specifically, we elicit weekly alcohol consumption, yearly binge drinking frequency, weight and height (to calculate BMI), a subjective assessment of the respondents' body-shape (underweight, healthy, overweight, etc.), the amount of the respondent's credit card debt, whether the subject has ever taken a payday loan, as well as the current stock of retirement savings and the respondent's current retirement savings rate.³

C.2 Analysis

We conducted the survey on the morning of February 1, 2019, with a total of 250 mTurk workers. Subjects received \$3 plus \$0.25 for each of eight attention check questions they answered correctly (two per policy). We retain the 161 subjects who correctly answered all attention check questions.

²We do not elicit attitudes to tobacco taxes because we conduct our survey with US subjects. The fraction of smokers in the US is substantially smaller than amongst our German laboratory subjects.

³We elicit additional characteristics, see Appendix D.5.

We define our independent variable by combining a subjects' responses to the two questions relating to any given policy, by extracting the first principal component. We encode the resulting variable such that negative coefficient estimates correspond to ideals-projective paternalism whereas positive coefficient estimates correspond to mistakes-projective paternalism.

For each policy, we perform an ordered probit regression of the support the respondent expresses for the policy under the assumption that all affected individuals are exactly as the person we had described in the vignette.

Panel A of Table [A9](#) displays the results. We find significant ideals-projective paternalism for alcohol taxes and for the retirement savings mandate. For sugary drinks taxes and for limits on short-term, high-interest lending, our coefficient estimates are not statistically significantly different from zero. In no case are our estimates consistent with mistakes-projective paternalism.

Panel B uses as dependent variable the support respondents express for the policy overall, when we ask them to consider that the policy will affect heterogenous individuals and might affect externalities. We find a significant negative relation between support and own characteristics for alcohol taxes and for the retirement savings mandate. We find a null effect for sugary drinks taxes. Accordingly, the fact that we do not observe ideals-projective paternalism amongst US respondents does not appear to be a result of beliefs about the effectiveness of the policy varying with respondents' own characteristics. Rather, US respondents simply appear to have different attitudes than Germans regarding body weight. Panel C uses beliefs about the effectiveness of the policies as a dependent variable and shows that in no case are they significantly associated with respondents' own characteristics. Regarding support for restrictions on short-term, high-interest lending, we do find a negative relation to respondent characteristics once we consider overall effects of the policy as opposed to the effects on the specific individual we described. That relation, however, is significant only at the 10%-level.

Overall we conclude that ideals-projective paternalism regarding real-world paternalistic policies is not due to beliefs about the effectiveness systematically varying with respondent characteristics. Moreover, while our results show that ideals-projective paternalism describes attitudes towards some but not all paternalistic policies amongst our US subjects, we find no indication of mistakes-projective paternalism.

| Policy | (1) Alcohol | (2) Sugar | (3) Retirement | (4) Loans |
|---|----------------------|----------------------|----------------------|--------------------|
| A. Policy support regarding person described in vignette | | | | |
| Own characteristics | -0.226** (0.095) | 0.031 (0.081) | -0.282*** (0.101) | 0.029 (0.070) |
| Cut 1 | -0.464 (0.691) | -1.922*** (0.736) | -1.654** (0.716) | -0.822 (0.666) |
| Cut 2 | 0.000 (0.694) | -1.458** (0.722) | -1.123 (0.708) | 0.402 (0.653) |
| Cut 3 | 0.673 (0.697) | -0.933 (0.716) | 0.097 (0.695) | 1.338** (0.658) |
| Observations | 161 | 161 | 146 | 158 |
| B. Overall policy support | | | | |
| Own characteristics | -0.269*** (0.087) | 0.072 (0.082) | -0.273*** (0.104) | -0.148* (0.084) |
| Cut 1 | -0.341 (0.702) | -1.982*** (0.719) | -2.189*** (0.759) | -1.131* (0.656) |
| Cut 2 | 0.164 (0.709) | -1.534** (0.711) | -1.511** (0.740) | -0.041 (0.654) |
| Cut 3 | 0.913 (0.712) | -0.882 (0.701) | -0.500 (0.721) | 0.926 (0.659) |
| Observations | 161 | 161 | 146 | 158 |
| C. Effectiveness beliefs | | | | |
| Own characteristics | -0.029 (0.068) | -0.055 (0.063) | - | -0.023 (0.089) |
| Observations | 161 | 161 | - | 158 |

Table A9: Results of the vignette study. Each column in each panel is a separate ordered probit regression that controls for the stage at which each policy was displayed, whether arguments in favor of or opposed to the interventions were mentioned first, the logarithm of the duration the subjects took to complete the sample, age, gender, and a dummy for each level of education. Standard errors clustered by subjects. We did not elicit beliefs about the effectiveness of the retirement savings mandate.

D Experiment implementation and instructions

D.1 Details

The experiment consists of an online component and a laboratory component, each encompassing multiple stages. Table A10 provides a schematic overview, corresponding to the order in which subjects proceed through the stages.⁴

Online component

1. Decision lists on intertemporal and risky choice
2. Non-incentivized questions

Laboratory component

1. Constructing Chooser’s opportunity sets
 2. *Additional decisions*
 - 2.1 Surrogate choices
 - 2.2 Attention test
 - 2.3 Belief elicitation
 - 2.4 Choice for oneself
 - 2.5 Altruism / spite elicitation
 3. *Real-world policies survey*
 - 3.1 Policy judgments
 - 3.2 Questions about reasons for impatient choice
 - 3.3 Elicitation of characteristics related to real-world policies
 4. Memory test
-

Table A10: Stages of the experiment. A random half of subjects completed Stage 2.3 of the laboratory component just before Stage 1.

Online component The main part of the online component presents the decision lists to elicit Choice Architects’ own intertemporal choices described above. The online component concludes with a battery of non-incentivized questions concerning demographic variables such as age and gender, as well as subjects’ financial and educational background, including their current overall credit card debt. Subjects also select one of the statements in panel B of Table 6 to describe themselves, and make a selection from four similar statements concerning risk preferences. Moreover, subjects provide answers to the non-numerical questions about risk and time preferences of Falk et al. (2016).

Laboratory component The laboratory component consists of the following stages.

1. *Constructing opportunity sets.* In each of fourteen rounds, Choice Architects first construct a opportunity set for the Chooser, and subsequently reveal their beliefs about the extent to which receiving a specific subset rather than the full option menu affects the Chooser’s well-being. In all but the Exogenous Restriction conditions, that subset is the one the Choice Architect has constructed herself. In the Exogenous Restriction conditions, the subset is given exogenously. In the two rounds of that condition

⁴Only Choice Architects who reveal beliefs before constructing opportunity sets are in the Choice Distribution Information treatment, because the value of belief elicitation after information provision is debatable.

in which all three options can be made available, the comparison subset consists either of only the most patient option, or of the two most patient options, determined randomly for each subject but the same in each round.⁵

2.1 Surrogate choices. Decisions in this stage reveal whether Choice Architects differ in their judgments about what choices are good for Choosers, or whether they merely vary in their propensity to act on such judgments. We exclude the latter mechanism by requiring Choice Architects to create singleton opportunity sets, and thus, essentially, to make surrogate choices.

2.2 Attention test. We incentivize subjects to pay attention by informing them before Stages 1 and 2.1 that these stages will be followed by a test about “what happened during this part.” Subjects know that their performance could completely determine their payment from the study.⁶

2.3 Belief elicitation. To relate projective paternalism to individuals’ levels of the false consensus effect, we elicit their beliefs about the distribution ten previous Choosers’ choices when all options were available. Subjects drag and drop ten tags labelled ‘Participant’ into three bins representing the choice options, as shown in Figure 6.⁷ We incentivize subjects to reveal their genuine beliefs as described below.

2.4 Choice for oneself. In order to test how front-end delay affects Choice Architects, they select an option from each of the option menus in Figure 1, one of which is subject to front-end delay.

2.5 Altruism / spite. As a measure of whether Choice Architects are benevolent or spiteful towards Choosers, they decide about the completion payment of a Chooser other than the one affected by their paternalistic decisions. They can either costlessly increase that payment by €1, leave it unchanged, or decrease it by €1.

3.1 Policy judgments. Subjects rate four policy proposals concerning taxes on sugary drinks, alcohol, and tobacco, as well as about restrictions on short-term, high-interest loans. The tax policies concern Switzerland. Because our subjects reside in Germany, their answers should thus not be influenced by considerations of having to pay those taxes themselves. We ask subjects to assume that the tax policies would be budget neutral. For each policy, we elicit the extent to which the subject supports or opposes its implementation in Switzerland.⁸ We also elicit beliefs about how the policy would change the welfare of the average citizen.⁹

3.2 Questions about reasons for impatient choice. Subjects answer questions about the factors they believe may cause impatient choices, and about their own reasons for making choice options unavailable to Choosers.¹⁰

⁵In the remaining two rounds of that condition, Choice Architects compare the opportunity set consisting of the most patient and middle options to the singleton opportunity set consisting of the most patient option.

⁶Appendix B.3 lists the test questions and incidences of correct responses. Subjects do not learn anything about the content or focus of the test before completing Stages 1 and 2.1. The test consists of eight questions about the stimuli the Choice Architects were presented with. It does not refer to Choice Architects’ own decisions.

⁷Our elicitation procedure is the balls-in-bins method described in [Delavande, Giné and McKenzie \(2011\)](#).

⁸Because the short-term, high-interest loans with small principal amounts we are interested in do not exist in Switzerland (possibly due to lacking demand), questions regarding short-term, high-interest lending concern Germany.

⁹The question about alcohol taxes concerns adolescents and young adults rather than the average citizen, but is otherwise identical.

¹⁰The questions and responses appear in Appendix B.3.

3.3 Elicitation of characteristics related to real-world policies. We elicit subjects’ body mass index,¹¹ their average alcohol consumption, their frequency of binge drinking (defined as the consumption of four (females) / five (males) or more units of alcohol within a two-hour period), their smoking status and cigarette consumption,¹² as well as their experience with short-term, high-interest loans.

4. Memory test. To test whether Choice Architects’ interventions might be affected by their memory of their own choices in the online component, we ask them to exactly reproduce their answers to four of the multiple-decision lists. Subjects only learn of this test immediately before it begins. They receive €2 for exact replication. Summary statistics and a robustness assessment of our results regarding subject performance in this memory check appear in Appendix B.8.

Incentives *Choice Architects’ decisions concerning Choosers.* Each Choice Architect faces a 25% chance that her decisions in Stages 1 or 2.1 affect a Chooser. If so, one of the rounds in one of these stages is drawn at random. Within that round, there is a 50% chance that the first half (construction of the Chooser’s opportunity set) determines the Chooser’s opportunity set, and a 50% chance that a randomly drawn line from the decision list in the second half (elicitation of beliefs about the welfare impact on the Chooser) determines the Chooser’s opportunity set and completion payment. Choice Architects know that Choosers will participate in a later laboratory session, and that their opportunities have not been altered by any other subject. Each Choice Architect, moreover, knows she faces a 25% chance of being matched with a second Chooser whose completion payment is adjusted according to her decision in Stage 2.5.

Choice Architects’ own payment. A Choice Architects’ own payment is determined by the online component, or by Stages 2.2, 2.3, or 2.4 of the laboratory component, each with a 25% chance.¹³ If Stage 2.2 (attention test) is selected, the Choice Architect receives €1 for each of 8 questions she answers correctly. Otherwise, her payment is determined according to one randomly selected round within the selected stage. If Stage 2.3 (belief elicitation) is selected, she receives €10 minus the number of tags that must be placed in different bins to make the elicited distribution coincide with the observed distribution of past Choosers’ choices for the randomly selected round.¹⁴

Timing Each Choice Architect proceeds through the laboratory component in the order listed in the previous section, except for the random half of subjects who complete Stage 2.3 first. Choice Architects

¹¹Subjects can click a button to open a window that asks them to enter their height h in cm and weight w in kg. The window then displays their body mass index as $BMI = \frac{w}{(h/100)^2}$.

¹²Individuals tend to over-report height and under-report weight (Gorber et al., 2007). A strong correlation remains, however, between reported and measured BMI (Nawaz et al., 2001). Because our interest centers on the sign of correlations, underreporting of BMI does not qualitatively affect our conclusions. Parallel statements hold regarding self-reported alcohol consumption (Sobell and Sobell, 1995) and self-reported cigarette smoking (West et al., 2007).

¹³Subjects learn at the beginning of the online component that there is a 25% chance that their payment will be determined entirely by a single decision from the online component, and a 75% chance that it will be determined by the laboratory component, without knowing what the latter component will entail.

¹⁴Formally, if the subject places x_i workers in bin i , for $i = 1, \dots, n$, and the true distribution of choices is y_1, \dots, y_n , then the subject’s payoff is given by $10 - \sum_{i=1}^n |y_i - x_i|$. Truthful revelation is optimal for a risk-neutral subject. Subjects understand this scheme more easily than alternatives. While risk aversion theoretically generates a tendency towards overly dispersed beliefs, Choice Architects’ risk preferences, elicited in the online component, predict neither the location nor the dispersion of elicited belief distributions.

make one surrogate choice for each round of each condition, with the exception that they make only one surrogate choice from option menu 5, for a total of eleven rounds.¹⁵ The belief-elicitation stage, Stage 2.3, consists of the same eleven rounds, and is preceded by an elicitation of beliefs about how Choosers selected from among the four statements in Table 6. In Stage 2.4, Choice Architects make a choice for themselves in eight rounds, six for each condition involving delayed money amounts, and two corresponding to the Induced Chooser Preferences condition.

Within each of these stages, the order in which subjects proceed through the conditions is randomized on an individual level. Questions regarding real world policies, by contrast, are presented in the same order for all subjects.¹⁶

Implementation All instructions are displayed on-screen. We intersperse them with four comprehension checks which subjects must pass in order to continue with the study, concerning (i) the incentive scheme and Induced Chooser Preferences condition, (ii) the fashion in which Choosers rank and obtain outcomes, (iii) choices concerning Choosers in Stages 1 and 2.1, and (iv) the belief elicitation in Stage 2.3. Each comprehension check consists of at least five statements with at least two answer options each. The subject must select the correct response to each statement. In case of a mistake, no feedback is given. Accordingly, it is exceedingly unlikely that subjects pass the comprehension checks by luck or by trial and error. Subjects who do not pass are referred back to the instructions (all subjects eventually passed). The instructions and comprehension checks are reproduced in Appendix D. The comprehension checks emphasize that there are no right or wrong answers in decisions affecting the Choosers.

All incentive payments are processed through PayPal. The invitation email informs subjects of this fact and asks them to open a PayPal account if they do not already possess one.¹⁷ Subjects received individualized links to ensure they would continue with the correct survey (implemented in qualtrics) even though they completed the online component on a different machine than the laboratory component.

D.2 Sessions

We ran the experiment in 16 sessions at the Cologne Economics Research Lab. All materials were presented in German. The same head research assistant was present in every session. Each session, two additional research assistants were present to help. Table A11 lists the details of each session. Dates and times reflect availability of the lab and the research assistant.

After the main sessions were concluded, we conducted four sessions to implement the Choice Architects' decisions that affected a Chooser. Choosers were presented with a single decision, and collected

¹⁵Option menu 5 corresponds to the Exogenous Restriction condition. The four rounds in that condition vary the constraints on the opportunity sets the Choice Architects may construct. Once Choice Architects are required to choose a single option, the rounds become identical.

¹⁶The order is 1. sugary drinks taxes, 2. alcohol taxes, 3. tobacco taxes, 4. restrictions on short-term, high-interest lending.

¹⁷PayPal accounts are free. Subjects received exactly the amount of money promised in the experiment; all transaction fees were paid by the researchers.

their payments according to the decision the Choice Architect had made in that round. We do not use any data from the implementation sessions.

| Choice Architect sessions | | |
|---------------------------|---------|---------|
| Session | Date | Time |
| 1 | 6/14/18 | 4 pm |
| 2 | 6/15/18 | 4 pm |
| 3 | 6/19/18 | 10 am |
| 4 | 6/19/18 | 1 pm |
| 5 | 6/19/18 | 3.30 pm |
| 6 | 6/20/18 | 10 am |
| 7 | 6/20/18 | 1 pm |
| 8 | 6/20/18 | 3.30 pm |
| 9 | 6/26/18 | 10 am |
| 10 | 6/26/18 | 1 pm |
| 11 | 6/26/18 | 3.30 pm |
| 12 | 6/27/18 | 1 pm |
| 13 | 6/27/18 | 3.30 pm |
| 14 | 7/3/18 | 1 pm |
| 15 | 7/3/18 | 3.30 pm |
| 16 | 7/4/18 | 2 pm |

| Chooser sessions | | |
|------------------|---------|---------|
| Session | Date | Time |
| 1 | 7/10/18 | 2 pm |
| 2 | 7/10/18 | 3.30 pm |
| 3 | 7/11/18 | 2 pm |
| 4 | 7/11/18 | 3.30 pm |
| 5 | 10/1/18 | 2pm |

Table A11: Dates for experimental sessions.

D.3 Instructions for the online component

[Horizontal lines represent screen breaks.]

Technical Check

To test whether your computer can display the study correctly, please copy the following number into the field below.

[Number]

If you do not see the number above, make sure Javascript is enabled on your web browser. Alternatively, use a different web browser.

This is a research study by the University of Cologne and the University of Toronto.

Parts

This study has two parts.

Online Part

Finish this part until [Date] (by midnight). This will only take a few minutes.

If you do not complete the online part, you will not be allowed to participate in the laboratory part.

Laboratory Part

Please appear in the laboratory at the time mentioned in the invitation email. This part will take between 1 and 2 hours.

PAYMENT

The payment for your participation in this study consists of two parts:

Base payment €12,50

[For sessions 1 and 2, the base payment was 9.50]

(€4.50 for the appearance at the laboratory part, and €8 for the completion of the laboratory part)

Bonus payment between €0 and €15

You will receive your base payment as soon as you have completed the laboratory part of the study.

The exact amount of your bonus payment, as well as the time at which you will receive it, depends on your decisions, as well as on chance.

The bonus payment and €5 of the base payment will be transferred via PayPal. For this purpose, you will provide your email address for the referral to the laboratory staff.

If you finish the online part but do not appear in the laboratory, you are entitled to pick up €2 at Prof. Ockenfels's office on weekdays between 10 a.m. and 12 noon until one week after the laboratory part's date.

At this stage, the subject gives informed consent. If no consent is given, the study is terminated.

Instructions for the online part

IMPORTANT: What happens in the online part of this study has no influence on what will happen in the laboratory part of the study.

In this part of the study you will participate in 12 decision rounds. Then you will answer some questions about yourself.

In each round you will see a list of six decisions, for example as follows:

| | | | |
|-----------|-----------------------|-----------------------|-----------|
| Option A1 | <input type="radio"/> | <input type="radio"/> | Option B1 |
| Option A2 | <input type="radio"/> | <input type="radio"/> | Option B2 |
| Option A3 | <input type="radio"/> | <input type="radio"/> | Option B3 |
| Option A4 | <input type="radio"/> | <input type="radio"/> | Option B4 |
| Option A5 | <input type="radio"/> | <input type="radio"/> | Option B5 |
| Option A6 | <input type="radio"/> | <input type="radio"/> | Option B6 |

These options will be replaced by specific amounts of money.

Your task is to select the option you truly prefer on each line.

With 25% probability, your total bonus payment will be determined by a single decision in one such list. In this case you will receive exactly what you have chosen on the corresponding line. (Which list and which decision this will be will be randomly decided by the computer at the end of this study.)

You should make every decision as if it were the one that counts - because it might be.

Bonus payment for this part

There is a 25% chance that your bonus payment from this study will be determined exclusively by this part of the study. (With the remaining probability of 75% it will be determined by a decision you will make in the laboratory part.)

In this case, at the end of the whole study, the computer will randomly select one of the decision rounds, and one decision from that round. You will receive exactly what you have chosen in this decision.

So it is in your interest to make every decision as if it were the one that counts because it may be!

Payments that depend on chance

Some options you can choose depend on chance (such as "Get €X with p% probability").

If you choose such an option, and it is randomly selected to determine your bonus payment, the following will happen. At the end of the laboratory part of this study, the study director will provide you with a die. You will be able to throw it once. The resulting number determines your final payout.

Late Payments

Some options you may choose involve receiving a certain amount of money at a given future date. This date can be up to six months after the laboratory part.

On behalf of the Ockenfels research group, we guarantee that if you decide for such an option, we will transfer exactly the specified amount at the specified time by PayPal.

The online part of this study starts now.

Your decisions and answers **will not** affect what will happen in the laboratory part of this study.

Please click NEXT.

[Decisions regarding time. The parameters X and Y are listed in footnote 24 of the main text.]

Please select an option on each line according to your real preference.

I would rather have . . .

| | |
|---|--|
| ...€X on the day of the laboratory part | <input type="radio"/> <input type="radio"/> ...€Y 1 month after the laboratory part |
| ...€X on the day of the laboratory part | <input type="radio"/> <input type="radio"/> ...€Y 2 months after the laboratory part |
| ...€X on the day of the laboratory part | <input type="radio"/> <input type="radio"/> ...€Y 3 months after the laboratory part |
| ...€X on the day of the laboratory part | <input type="radio"/> <input type="radio"/> ...€Y 4 months after the laboratory part |
| ...€X on the day of the laboratory part | <input type="radio"/> <input type="radio"/> ...€Y 5 months after the laboratory part |
| ...€X on the day of the laboratory part | <input type="radio"/> <input type="radio"/> ...€Y 6 months after the laboratory part |

[Decisions regarding risk. The parameters X and Y are listed in footnote 25 of the main text.]

Please choose one option on each line, depending on what you really prefer (all payments for this round will be made on the day of the lab experiment)

I would rather have . . .

| | | | |
|---|-----------------------|-----------------------|-----------------------|
| ... € X with probability $p\%$ and € Y with probability $(1 - p)\%$ | <input type="radio"/> | <input type="radio"/> | ... €6 with certainty |
| ... € X with probability $p\%$ and € Y with probability $(1 - p)\%$ | <input type="radio"/> | <input type="radio"/> | ... €5 with certainty |
| ... € X with probability $p\%$ and € Y with probability $(1 - p)\%$ | <input type="radio"/> | <input type="radio"/> | ... €4 with certainty |
| ... € X with probability $p\%$ and € Y with probability $(1 - p)\%$ | <input type="radio"/> | <input type="radio"/> | ... €3 with certainty |
| ... € X with probability $p\%$ and € Y with probability $(1 - p)\%$ | <input type="radio"/> | <input type="radio"/> | ... €2 with certainty |
| ... € X with probability $p\%$ and € Y with probability $(1 - p)\%$ | <input type="radio"/> | <input type="radio"/> | ... €1 with certainty |

Questions about yourself.

To conclude the online part, we would like to ask you some questions about yourself.

Please answer truthfully.

Your answers will not affect your payment or what will happen in the laboratory part of this study.

What is your gender?

[male; female; not listed above (e.g. genderqueer); prefer not to say]

How old are you?

[18 - 90]

How many credit cards do you hold?

[1; 2; 3; 4; 5; 6; 7; 8; 9; 10; >10; prefer not to say]

How much credit card debt do you currently have (in total, in Euros, across all your credit cards)?

[; 0; 1-250; 251-500; 501-750; 751-1000; 1001-1500; 1501-2000; 2001-3000; 3001-5000; 5001-10000; >10000]

How much money do you spend on average per month (including rent, food, mobility, etc.)?

[€ 0 - € 50; € 50 - € 100; € 100 - € 150; € 150 - € 200; € 200 - € 250; € 250 - € 300; € 300 - € 350; € 350 - € 400; € 400 - € 450; € 450 - € 500; € 500 - € 600; € 600 - € 700; € 700 - € 800; € 800 - € 900; € 900 - € 1000; € 1000 - € 1250; € 1250 - € 1500; € 1500 - € 1750; € 1750 - € 2000; € 2000 - € 2500; € 2500 - € 3000; more than € 3000; I prefer not to say]

Please select the statement that describes you best [Choices were displayed in individually randomized order.]

[I am a patient person. I am happy with this. (I often forego things in the present with regard to the future.); I am a patient person. I often regret my decisions. (Perhaps too often, I forego things in the present with regard to the future.); I am an impatient person. I am happy with this. (I rarely forego things in the present with regard to the future.); I am an impatient

person. I often regret my decisions. (Perhaps too rarely, I forego things in the present with regard to the future.)]

Please select the statement that describes you best

[I am a risk-taker. I am happy with that. (I like to take risks.); I am a risk-averse person. I am happy with that. (I try to avoid risks if possible.); I am a risk-taker. I often regret my decisions. (I might be taking too many risks.); I am a risk-averse person. I often regret my decisions. (I might be trying to avoid risks too much.)]

Please select the statement that describes you best: I often do without things so that I can afford more later.

[Absolutely not like me; Very little like me; Not really like me; Neutral; A little like me; Very similar to me; Absolutely like me]

Are you generally a person who takes risks or do you try to avoid them?

[I try extremely hard to avoid risks; I try pretty hard to avoid risks; I try a little bit to avoid risk; I don't dislike taking risks; I'm quite willing to take risks; I'm extremely willing to take risks]

Please select the statement that describes you best: I tend to put things off until later, although it would be better to do them right away.

[Absolutely not like me; Very little like me; Not really like me; Neutral; A little like me; Very similar to me; Absolutely like me]

At which faculty do you study?

[Faculty of Economics, Management and Social Science; Faculty of Law; Faculty of Medicine; Faculty of Philosophy; Faculty of Mathematics and Natural Sciences; Faculty of the Humanities; I am not a student]

Which state conferred your Abitur?

[Baden-Württemberg; Bayern; Berlin; Brandenburg; Bremen; Hamburg; Hesse; Mecklenburg-Vorpommern; Niedersachsen; Nordrhein-Westfalen; Rheinland-Pfalz; Saarland; Sachsen; Sachsen-Anhalt; Schleswig-Holstein; Thüringen; I received the International Baccalaureate; I do not have an Abitur; I prefer not to say]

What was your Grade Point Average in the Abitur?

[1.0, 1.1, 1.2, . . . , 3.9, 4.0; I do not have an Abitur; I do not remember; I prefer not to say]

What was your Abitur grade in Mathematics?

[15 points (1+), 14 points (1), 13 points (1-), 12 points (2+), 11 points (2), 10 points, (2-), . . . , 3 points (5+), 2 points (2), 1 point (2-), 0 points; I do not have an Abitur; I do not remember; I prefer not to say]

What was your Abitur grade in German?

[15 points (1+), 14 points (1), 13 points (1-), 12 points (2+), 11 points (2), 10 points, (2-), . . . , 3 points (5+), 2 points (2), 1 point (2-), 0 points; I do not have an Abitur; I do not remember; I prefer not to say]

Have you taken an honors class in Mathematics in high school (Leistungskurs im Abitur)?

[Yes; No; I do not have an Abitur]

Have you taken an honors class in German in high school (Leistungskurs im Abitur)?

[Yes; No; I do not have an Abitur]

This is the end of the online part of this study

Please arrive at the laboratory on time.

This is a study of individual decision making. Therefore, please do not discuss this study with other people.

Please close this browser window.

(If you leave this window open, the laboratory part of this study will not start for you.)

D.4 Instructions for the laboratory component

Laboratory Part

Please enter your personal experiment code to ensure that you are proceeding with the correct questionnaire.¹⁸

Please enter the password provided by the experiment staff to start the laboratory part of this study.¹⁹

Instructions

Please read carefully.

This study contains multiple comprehension tests.

For simplicity, this study uses male pronouns throughout. They refer to both genders.

Payment for this study

The laboratory component of this study consists of 3 parts. Your decisions influence not only your own pay, but also that of future experiment participants. The study ends with some opinion questions, and some questions about yourself.

Affecting your own payment

There is a 75% chance that the lab component of the study will determine your bonus payment. (With the remaining 25% probability, your bonus payment will be determined by the online component.)

In this case your payment will be determined by exactly one of the three parts of the lab component. At the end of the study, the computer will randomly select a part and a decision you made in that part. This decision will be the only one that determines your bonus payment.

So you should make every decision as if it's the one that counts - because it may be!

Affecting the payment of other experiment participants

A part of this study consists of decisions that affect a future experiment participant. You will be able to influence that person's decision options and bonus payment.

At the end of this study, the computer selects *exactly one* decision you have made in this part. With a 1 in 4 chance we will match you with a future experiment participant. Your decisions in this study will then affect that person exactly as you have determined.

¹⁸Each participant received an individual number in the invitation email. They were asked to sit at the computer terminal corresponding to their number. That computer contained the individual-specific link to the qualtrics survey that the subject had started in the online part. This mechanism ensures that subjects continue with their own survey, without requiring the storage of any identifiable data within the qualtrics survey.

¹⁹Subjects could begin the laboratory part only after every subject was seated at the correct terminal. At that stage, the experiment staff supplied the password required to continue.

The future experiment participant's options for the bonus payment are determined entirely by the single decision of yours that the computer has randomly selected to be carried out.

You are the only person who determines the options of this future experiment participant. The future experiment participant will not make decisions that affect others; all his decisions will only affect himself.

You are the only person who determines the options of this future experiment participant. The future experiment participant will not make decisions that affect others; all his decisions will only affect him.

None of the options that may determine your own payment in this study have been influenced by anyone else.

IMPORTANT: There is NO DECEPTION in this study. We will conduct the partner studies with the future experiment participants within the next 30 days and your decisions will affect future experiment participants with exactly the stated probability.

Anything else would violate the Ethics Protocol (UT36180) under which this study is conducted.

Some rounds are about money that you or the other experiment participant can receive at different times. Other rounds are about gold and silver coins. We now explain these one after the other.

Money at different points in time

In every decision concerning money at different points in time, the following choice will be made available (both for the future experiment participant, and for you):

Standard option:

Receive a bonus of €0 today and €15 in 6 months.

Alternative options such as the following may also be available:

Receive a bonus of €X today and €Y in 6 months.

(X and Y will be replaced by concrete amounts)

On behalf of the Ockenfels research group, we guarantee that if an experiment participant chooses such an option, we will transfer exactly the specified amount at the specified time via PayPal.

Gold and silver tokens

Some decisions in this study concern gold and silver tokens. If an experiment participant is paid with gold and silver tokens, the following will happen.

We will exchange all tokens into Euros and transfer them to the PayPal account of the experiment participant on the day of the study.

Value of gold and silver tokens

Each **gold token** is worth exactly €1.

The value of the silver tokens varies for different experiment participants.

For $\frac{1}{3}$ of the participants the value of a **silver token** is €1.

For another $\frac{1}{3}$ it is €0.5.

And for the last $\frac{1}{3}$ it is €0.

Before the future experiment participant makes a choice, he learns exactly how many Euros he will receive per silver token. If you make a choice regarding the tokens for your own bonus, you will also know exactly how many Euros you will receive per silver token.

However, you will **not** know how many euros the future experiment participant will receive per silver token. He could get €1, €0.5, or €0 per silver token. All you know is that for the future experiment participant each of these cases is equally likely.

To ensure that you have understood these elements of the study correctly, please click on all true statements (and only those).²⁰

- For $\frac{1}{3}$ of the experiment participants the value of a silver token is €1. For another $\frac{1}{3}$ it is €0.5. And for the last $\frac{1}{3}$ it is €0. I will know which of them the future experiment participant will get, but the future experiment participant will not know.
- For $\frac{1}{3}$ of the experiment participants the value of a silver token is €1. For another $\frac{1}{3}$ it is €0.5. And for the last $\frac{1}{3}$ it is €0. The future experiment participant will know which one of these he will get before making a choice, but I don't know which one he will get.
- My bonus payment is determined by three randomly selected decisions, one from each part of the study.
- My bonus payment is determined by exactly one decision from one part of the study.
- The options of the future experiment participant who is assigned to me with a $\frac{1}{4}$ chance are completely determined by a single randomly selected decision of mine.
- All the decisions I make in the study do not affect anyone else, but determine my own payment.

If you feel that you have understood the instructions but still cannot continue, please raise your hand.

The three parts of the laboratory component of this study begin now.

You will receive the instructions for each part just before the corresponding part begins.

Part 1 of 3

The decisions you make in this part will affect another experiment participant's bonus payment.

This is the longest part of the study, and will take about twice as long as the other two parts.

Please make all decisions in this section carefully.

How the future experiment participant is affected by your decisions in this part

This part has 25 rounds. Each round has two halves.

The computer randomly selects one round from this part and one of the two halves within this round. Every round and every half is equally likely.

²⁰All statements were displayed in individually randomized order. A subject could continue only if he had correctly marked all of the statements. In case of an error, the participant did not receive feedback about which of the statements was marked incorrectly.

The bonus payments and decision options of the future experiment participant will be determined by exactly this decision of yours.

So you should make every decision as if it were the decision that will affect the future experiment participant. Because it may be!

How this part affects your own bonus payment

It is in your own interest to be attentive. At the end of this part there will be a test of what happened during this part. It is possible that your bonus payment for this study will be determined entirely by your performance on this test.

We now explain what will happen in each of the two halves of each round.

First half of each round

Available and unavailable choice options

The future experiment participant will be able to choose his bonus payment from a set of options as follows.²¹

Opportunity set X

| | |
|--------------------------|----------|
| <input type="checkbox"/> | Option A |
| <input type="checkbox"/> | Option B |
| <input type="checkbox"/> | Option C |

(Options A, B, and C will be replaced by concrete payments.)

You decide whether all options should be available to the future experiment participant or whether one or more of them will be unavailable. (You must make at least one option available in each round.)

We ask you to make these decisions with care. There are no right or wrong decisions. These decisions do not affect your own bonus payment.

The details by which you will make the choice options of the future experiment participant available or unavailable will vary across the rounds.

Why such decisions?

People have different views about influencing other people's choices and decisions.

There are no right or wrong answers. We ask you to make exactly those decisions that reflect your genuine views.

Messages to the future experiment participant

In addition to making options available or unavailable, you will be able to send messages to future experiment participants if you wish. There are two types of messages in this study.

Click messages

In some rounds you will be able to click a button to advise the future experiment participant not to rank an option highly. If you do, the future experiment participant will see the following when making decisions about his options:

²¹There is no natural-sounding translation of the expression 'opportunity set' in German. We have used the semantically closest expression 'Warenkorb'. Its literal translation is 'basket of goods'.

| | |
|--------------------------|---|
| <input type="checkbox"/> | \$X1 today, \$Y1 in 6 months. |
| <input type="checkbox"/> | \$X2 today, \$Y2 in 6 months. * |
| <input type="checkbox"/> | \$X3 today, \$Y3 in 6 months. * |

*A previous participant who has thought about your options recommends that you do NOT rank this option highly.

Free-form messages

If you wish, you can also send a freely formulated message to the future experiment participant. In this case, the future experiment participant will see the following when deciding between his options:

A previous participant who has thought about these choice options would like to tell you the following:
[Your message]

[This screen is only displayed to participants in the Choice Distribution Information treatment]

How previous experiment participants have chosen from the options

In addition to making options available or unavailable, in each round you can click a button to view a table like the following.

| | |
|--|---------------------------------|
| N1 of 100 previous experiment participants chose | €X1 today and €Y1 in six months |
| N2 of 100 previous experiment participants chose | €X2 today and €Y2 in six months |
| N3 of 100 previous experiment participants chose | €X3 today and €Y3 in six months |

This table displays how 100 previous experiment participants have chosen between the options when all options were available (X1, Y1, N1, etc. will be replaced by numbers).

How the future experiment participant will choose

The future experiment participant will **not** see which of the options are available in an opportunity set and which are not.

Instead, he will see all options and rank them according to his preference, regardless of whether they are available or not. The participant then receives the available option that he has ranked the highest.

The experiment-participant will know that not all options may be available, and that he will receive the option he has ranked the highest among those options that are available. This is all he knows about how his payments are determined.

Here you can see how the future experiment participant can rank his options. We will ask him to put the option he most wants first and the option he least wants third (To try this, drag the options into the box on the right.)

| | |
|---|---|
| <p>Items</p> <p>Option A</p> <p>Option B</p> <p>Option C</p> | <div style="border: 1px solid black; padding: 5px;"> <p>Rank the items here</p> </div> |
|---|---|

Example

Suppose there are three options, A, B and C.

Also suppose you make option A unavailable for the future experiment participant.

For example, the future experiment participant might rank A first, then B, and C last. In this case, the experiment participant will receive B. The reason is that A is not available, and the participant ranks B higher than C.

To ensure that you understand how your decisions affect the other experiment participant, please answer the following questions.

Each question concerns three options, A, B and C.

Assume that the future experiment participant ranks B at the top, followed by C, and that he ranks A lowest.

If all options are available, which will the future experiment participant receive?

[Option A, Option B, Option C.]

If Option A is not available, which option will the future experiment participant receive?

[Option A, Option B, Option C.]

If Option B is not available, which option will the future experiment participant receive?

[Option A, Option B, Option C.]

If Option C is not available, which option will the future experiment participant receive?

[Option A, Option B, Option C.]

If Option B and C are not available, which option will the future experiment participant receive?

[Option A, Option B, Option C.]

Second Half of Each Round

In the second half of each round you will see two opportunity sets according to which the choices of future experiment participants could be determined, such as in the following example.

| | |
|-----------------------|----------------------|
| Opportunity Set Right | Opportunity Set Left |
| Option A | Option A |
| Option B | Option B |
| Option C | Option C |

In this example, all options are available in the opportunity set on the left. Option B is not available in the opportunity set on the right.

Your decision is

- whether the future experiment participant should receive the option that he has ranked highest from the opportunity set on the left, or
- whether the future experiment participant should receive the option that he has ranked the highest from the opportunity set on the right; AND additionally the amount €Z should be added to / deducted from his base payment for the experiment.

You make several such decisions, for different values of Z, in a list such as this one:

| | |
|---|---|
| The bonus payment of the future participant should be determined by ... | |
| ... opportunity set Left and his base payment remains unchanged | <input type="radio"/> ... opportunity set Right and his base payment is raised by €0.5. |
| ... opportunity set Left and his base payment remains unchanged | <input type="radio"/> ... opportunity set Right and his base payment is raised by €0.3. |
| ... opportunity set Left and his base payment remains unchanged | <input type="radio"/> ... opportunity set Right and his base payment is raised by €0.2. |
| ... opportunity set Left and his base payment remains unchanged | <input type="radio"/> ... opportunity set Right and his base payment is raised by €0.1. |
| ... | ... |

Implementation

If this half of a round is randomly selected for the implementation, the following will happen:

The computer randomly selects one of the lines in the list. The decision you made in this line is carried out.

Therefore, you should make every decision on each line as if it were the one that counts. Because it may be!

In some rounds Opportunity Set Left and Opportunity Set Right may be the same. This is intentional. In these cases too, please make a careful choice in each line.

In the second half of each round we will also ask you:

In your opinion, which opportunity set is better for the future experiment participants' own good?

This question refers to **your opinion** about which opportunity set is better for the future experiment participant's own good – **regardless of whether the future experiment participant would agree with you or not!**

To ensure that you have understood these elements of the study correctly, please click on all true statements (and only those).²²

- The computer will carry out all decisions I make in this part.

²²All statements were displayed in individually randomized order. A subject could continue only if he had correctly marked all of the statements. In case of an error, the participant did not receive feedback about which of the statements was marked incorrectly.

- I can make some options available and others not, if I think that is right.
- I can make all the options available if I think that is right.
- I can make all but one option unavailable if I think that's right.
- There are NO right or wrong decisions, I can make available or unavailable whatever I think is right (as long as at least one option is available for the future experiment participant).
- There ARE right or wrong decisions, I can NOT just make available or unavailable whatever I think is right.
- The future experiment participant will only see the options I make available and will not even see the options I make unavailable.
- The future experiment participant will rank all options. He will not know which ones are available or unavailable. His bonus payment is based on the option he has ranked most highly amongst those that are available.
- The computer carries out ONE randomly selected decision. This decision is equally likely from the first half of a round as from the second half of a round. And each round is equally likely.

If you feel that you have understood the instructions but still cannot continue, please raise your hand.

First half of round 1

(Note: The subject is informed that they have been matched with another participant that's either impatient and unhappy, impatient and happy, patient and unhappy, patient and happy, or they are informed that they have been matched randomly.)

If this round is implemented, it will concern an experimental participant who says about himself:

I'm an impatient person. I often regret my decisions. (Perhaps too often, I forego things in the present with regard to the future.)

Which of the choice options will be available to the future participant?

(You must make at least one option available)

| | Available | Unavailable | Recommend against |
|--|-----------------------|-----------------------|--------------------------|
| €X1 today, €Y1 in 6 months from today. | <input type="radio"/> | <input type="radio"/> | <input type="checkbox"/> |
| €X2 today, €Y2 in 6 months from today. | <input type="radio"/> | <input type="radio"/> | <input type="checkbox"/> |
| €X3 today, €Y3 in 6 months from today. | <input type="radio"/> | <input type="radio"/> | <input type="checkbox"/> |

If you have a message for the future participant, enter it here:

Second half of round 1

(Note: The subject is informed that they have been matched with another participant that's either impatient and unhappy, impatient and happy, patient and unhappy, patient and happy, or they are informed that they have been matched randomly.)

If this round is implemented, it will concern an experimental participant who says about himself:

I'm an impatient person. I often regret my decisions. (Perhaps too often, I forego things in the present with regard to the future.)

| | |
|--|--|
| <p>Choice Set Left</p> <p>€X1 today, €Y1 in 6 months €X2 today, €Y2 in 6 months €X3 today, €Y3 in 6 months</p> | <p>Choice Set Right</p> <p>€X1 today, €Y1 in 6 months €X2 today, €Y2 in 6 months €X3 today, €Y3 in 6 months</p> |
|--|--|

Which choice set is better for the future participant's own good?

Choice set Left Both equal Choice set Right

The bonus payment of the future participant should be determined by ...

| | | | |
|--|-----------------------|--|-----------------------|
| ... opportunity set Left, and his base payment remains unchanged | <input type="radio"/> | ... opportunity set Right and his base payment is raised by €1. | <input type="radio"/> |
| ... opportunity set Left, and his base payment remains unchanged | <input type="radio"/> | ... opportunity set Right and his base payment is raised by €0.5. | <input type="radio"/> |
| ... opportunity set Left, and his base payment remains unchanged | <input type="radio"/> | ... opportunity set Right and his base payment is raised by €0.2. | <input type="radio"/> |
| ... opportunity set Left, and his base payment remains unchanged | <input type="radio"/> | ... opportunity set Right and his base payment is raised by €0.1. | <input type="radio"/> |
| ... opportunity set Left, and his base payment remains unchanged | <input type="radio"/> | ... opportunity set Right and his base payment is lowered by €0.1. | <input type="radio"/> |
| ... opportunity set Left, and his base payment remains unchanged | <input type="radio"/> | ... opportunity set Right and his base payment is lowered by €0.2. | <input type="radio"/> |
| ... opportunity set Left, and his base payment remains unchanged | <input type="radio"/> | ... opportunity set Right and his base payment is lowered by €0.5. | <input type="radio"/> |
| ... opportunity set Left, and his base payment remains unchanged | <input type="radio"/> | ... opportunity set Right and his base payment is lowered by €1. | <input type="radio"/> |

[The subject proceeds through the remaining rounds of parts 1 and 2 in the same fashion]

Please answer all questions about this part

If the computer selects this part to determine your payment, your bonus is calculated as follows: You receive €1 for each correct answer, and €0 for each incorrect answer.

In some rounds I could remove options, but I could never add options for the future experiment participant.

[True, False]

For all options which the future experiment participant could receive, the early payment will always be on the day of the experiment.

[True, False]

For some options that the future experiment participant could have received, the late payment will occur up to 7 months after the day of the study.

[True, False]

In some rounds, I had to make a single option available to the future experiment participant; I could not make multiple options available, even if I wanted to.

[True, False]

Some rounds concerned gold tokens and silver tokens. These rounds only concerned money that would be paid soon after the experiment, not money that would be paid only months after the experiment.

[True, False]

Other experiment participants could receive €0.40, €0.50, or €0.60 per silver token, each with the same probability.

[True, False]

In some lines of the decision lists, the base payment of the future participant could be increased. In other rounds it could be decreased.

[True, False]

If I made some options unavailable, this means that the other experiment participant cannot see that option, and therefore does not need to think about these options.

[True, False]

Part 2 of 3

This part has 12 rounds. Each round follows the same structure.

Previous experiment participants decided between different options from shopping baskets of three options each as follows:

Shopping basket X

| | |
|--------------------------|----------|
| <input type="checkbox"/> | Option A |
| <input type="checkbox"/> | Option B |
| <input type="checkbox"/> | Option C |

(Options A, B, and C were concrete payments.)

In each round we show you a different shopping basket. Your task is to estimate how previous participants chose between the options in the given shopping basket.

(In one of the 12 rounds we ask you instead to estimate which of 4 descriptions each of the previous participants considered the best description of themselves.)

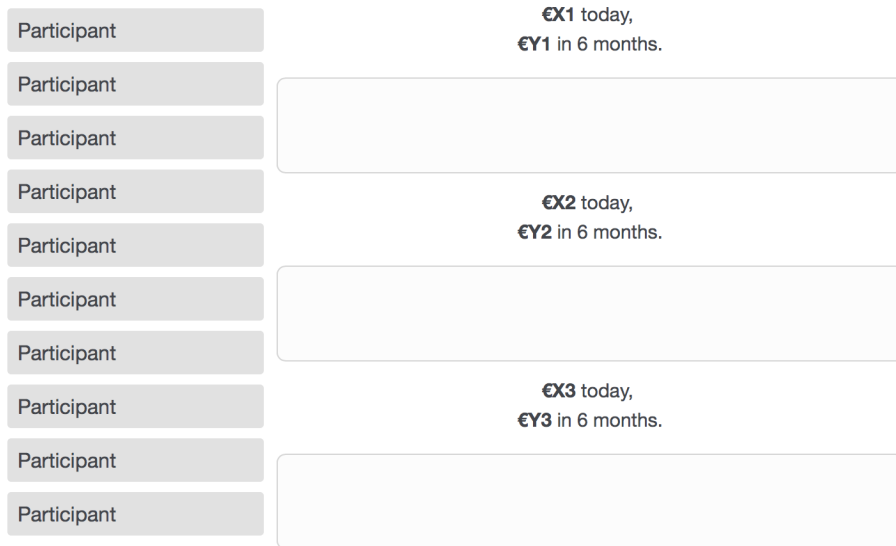
You will make these estimates as follows:

On the left side of the graph below you see "Participant" written 10 times. Each represents one of the 10 experiment participants. You can move them using Drag & Drop.

On the right side you see three fields. Each of them is a choice option.

Your task is to sort each of the 10 experiment participants on the left into one of the boxes on the right, depending on your estimate of how previous experiment participants actually chose from these options.

If you estimate that X of the previous participants had selected option A, that Y had selected option B, and that Z had selected option C, place X of the "Participants" in the "Option A" container, Y of the "Participants" in the "Option B" container, and Z of the "Participants" in the "Option C" container.



How your estimate will affect your bonus payment

Your payment from this study could be determined solely by this part of the study! (The computer will randomly decide whether you will be paid for this or another part.)

If so, the following will happen.

The computer randomly draws a round from this part.

We have data on how 10 previous experiment participants chose among these choice options. We compare your estimate with what the previous experiment participants actually chose.

If your estimate for the selected round is correct, your bonus payment will be €10, which you will receive today via PayPal.

If your estimate is incorrect compared to what previous experiment participants actually did, the following will happen.

Suppose you have assigned too many experiment participants to one option and too few to another option (compared to what the previous experiment participants actually chose).

We then take one of the fields “experiment participant” from one of the containers that has too many fields “experiment participant”, and place it in one of the containers that has too few. We will do this until there are exactly as many “experiment participants” fields in each container as we actually observed with the 10 previous experiment participants.

For each “experiment participant” field that we put in a different container in this way, we will deduct €1 from the €10 that you would receive if you had perfectly estimated the decisions of the previous experiment participants. The rest you will receive as a bonus payment.

Therefore, you can expect that you will earn the most with this study if you think carefully about how the previous experiment participants actually decided and place the experiment participants in the containers accordingly. _____

Gold and silver coins

Some rounds involve decisions on gold and silver coins.

Their estimate concerns former **experiment participants** who knew whether they would receive €1, €0.5, or €0 per silver coin **before** making their decisions.

Please select all true statements. You can continue as soon as you have classified all statements correctly.

- I will make the most money in this part if I put all the experiment participants in the same container.
- I will make the most money in this part if I put the same number of experiment participants in each container.
- I will make the most money in this part by placing the experiment participants in the containers, according to my best estimate of how the previous experiment participants actually decided.
- If I put too many experiment participants in one container and too few in another (compared to what the previous experiment participants actually chose), I lose €1 for each experiment participant that I put in the wrong container.
- My answers in this section do not affect my payment.
- My payment from this study could be determined solely by this part of the study!

If you feel that you have understood the instructions but still cannot continue, raise your hand.

Part 3 of 3

In this section you make decisions that only affect your own payment.

This part has 8 rounds. You will make a selection in each round. At the end of the experiment, the computer randomly selects **exactly one** of your options. If this part determines your payment for this study, this option is the only one that counts.

So you should make every decision as if it were the one that counts. Because it maybe be!

[In rounds corresponding to the Induced Chooser Preferences condition, subjects see the following screen.]

Please choose one of the following options, depending on what you actually prefer.

- X1 gold coins, Y1 silver coins
- X2 gold coins, Y2 silver coins
- X3 gold coins, Y3 silver coins

Value of gold and silver coins

Each gold coin is worth €1.

The value of the silver coins differs between the experiment participants. For you every silver coin is worth €0.5.

This payment will be made today.

[In rounds except those corresponding to the Induced Chooser Preferences condition, subjects see the following screen. In the round with front-end delay, the dates are '1 week from today' and '6 months plus a week from today']

Please choose one of the following options, depending on what you actually prefer.

- € X1 today, € Y1 in 6 months
- € X2 today, € Y2 in 6 months
- € X3 today, € Y3 in 6 months

Completion payment for future experiment participants

There is a 1 in 4 chance that you will be assigned to a second future experiment participant. This is another experiment participant than the one for which you have decided what choice options they should get.

Like yourself, this future experiment participant will receive a base payment of € 9.50 for the completion of the study.

However, you can decide to change his base payment. The base payment of the future experiment participant will be exactly what you decide.

What completion payment should the second future experiment participant receive?

(This is a person other than the one whose options you have made available or unavailable)

- The future experiment participant should receive a base payment of € 10.50 instead of € 9.50.
- The future experiment participant should receive the planned base payment of € 9.50.
- The future experiment participant should receive a base payment of € 8.50 instead of € 9.50.

Questions about your opinion and about yourself

The last part of this study consists of a questionnaire. Please answer the questions honestly. Your answers do not affect your payment or the payment of other people from this study.

We would first like to ask your opinion on four policy proposals.

The first three proposals concern Switzerland. That country is very similar to Germany in many aspects. Since Switzerland has only one tenth of Germany's population and is not a member of the European Union, policy changes in Switzerland have no direct effect on Germany.

Proposal 1: Taxes on high-sugar beverages

Several countries around the world levy taxes on beverages with a high sugar content (which is associated with obesity). These countries include Hungary, Ireland, Norway, the Philippines, the United Arab Emirates, Great Britain and others.

There are many overweight people in Switzerland, as in the vast majority of developed countries.

What is your attitude towards a tax that would increase the price of sugary beverages in Switzerland by 20% (income tax would be reduced so that the government would earn the same tax revenue as before)?

Switzerland should . . .

[definitely not introduce such a tax, probably not introduce such a tax, probably introduce such a tax, definitely introduce such a tax.]

What do you think the effect of such a tax would be?

If such a tax were introduced, people in Switzerland would be on average. . .

[significantly worse off, a little worse off, neither better nor worse off, a little better off, significantly better off.]

Proposal 2: Taxes on alcoholic beverages

Binge drinking is the excessive consumption of alcoholic beverages with the aim of getting heavily drunk. Binge drinking is sometimes considered problematic. One reason is that binge drinking might be harmful to health.

It is therefore being discussed whether alcohol taxes should be increased in order to make binge drinking more expensive and correspondingly less frequent. Specifically, the price of cheap alcohol (spirits and cheap wines) could be increased disproportionately in percentage terms by charging the tax per liter of pure alcohol in the beverage.

What is your attitude towards a tax that would increase the price of spirits and cheap wines in Switzerland by 50%, on average (income tax would be reduced so that the government would earn the same tax revenue as before)?

Switzerland should ...

[definitely not introduce such a tax, probably not introduce such a tax, probably introduce such a tax, definitely introduce such a tax.]

What do you think the effect of such a tax would be?

If such a tax were introduced, adolescents or young adults in Switzerland would be on average...

[significantly worse off, a little worse off, neither better nor worse off, a little better off, significantly better off.]

Proposal 3: Taxes on tobacco

The harmful effects on health and the addictive potential of smoking cigarettes have been proven scientifically.

There is therefore a discussion as to whether taxes on cigarettes and other tobacco products in Switzerland should be further increased in order to reduce consumption and to deter young people more from smoking.

What is your attitude towards a tax that would increase the price of cigarettes of other tobacco products in Switzerland by an average of half the current price (income tax would be reduced so that the government would earn the same tax revenue as before)?

Switzerland should ...

[definitely not introduce such a tax, probably not introduce such a tax, probably introduce such a tax, definitely introduce such a tax.]

What do you think the effect of such a tax would be?

If such a tax were introduced, people in Switzerland would be on average...

[significantly worse off, a little worse off, neither better nor worse off, a little better off, significantly better off.]

Proposal 4: Restrictions on short-term loans

Short-term loans have been available in Germany since 2010. Such loans typically finance consumption, ranging from €50 to €3000, and must be repaid after 30 or 60 days.

The interest that can be charged on such loans is high, but limited by law. Therefore, people with very bad credit cannot obtain such loans, even if banks would be willing to grant such loans at very high interest rates and borrowers with very low credit ratings would be willing to pay very high interest rates for them.

It is being discussed whether the restrictions should be loosened. Advocates argue that many people who really need the money will otherwise not get credit. Opponents argue that such loans are very expensive and people can end up debt cycles.

How do you feel about that? The market for short-term loans in Germany should...

[be severely restricted (in this case, far fewer people can receive a short-term loan), be somewhat restricted (in this case, fewer people can get a short-term loan), remain unchanged, be somewhat liberalized (in this case, more people can get a short-term loan), be severely liberalized (in this case, far more people can get a short-term loan)]

What do you think the effect of such liberalization would be?

If this market were strongly liberalized, the average German would be...

[significantly worse off, a little worse off, neither better nor worse off, a little better off, significantly better off.]

In a previous part of this study, you decided to make certain options available or unavailable.

We would like to ask you to explain in your own words: Why did you make the decisions you did?

Specifically we ask you about your decisions in the following round:

The round was about an experimental participant who said about himself:

I'm an impatient person. I often regret my decisions. (I probably do without the present too seldom with regard to the future.)

You have made the following options available: ...

You have made the following options unavailable: ...

Your answer:

We would now like to ask you some questions about the experimental decisions

The questions on this page concern the following scenario:

Suppose an experiment participant can choose between the following options:

- Option A: Get €0 today, €10 in half a year
- Option B: Get €4 today, €0 in half a year

How easy do you think it is for the future experiment participant to know which of these two options is best for him?
[Very easy, Rather simple, rather difficult, very difficult]

How many out of 10 participants will choose the option that is really best for them?
[0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

How many out of 10 experiment participants will choose an option other than the one they actually wanted to choose?
[0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

Suppose an experiment participant chooses "Option A: €0 today, €10 in 6 months from today". Given the experiment participant chooses this option, is this a good or bad choice for this experiment participant?
[Most likely bad, Very likely bad, Somewhat likely bad, Somewhat likely good, Very likely good, Most likely good]

Suppose the experiment participant chooses "€4 today, €0 in 6 months from today". Given the experiment participant chooses this option, is this a good or bad choice for this experiment participant?
[Most likely bad, Very likely bad, Somewhat likely bad, Somewhat likely good, Very likely good, Most likely good]

Suppose an experiment participant can choose between the following options:

- Option A: €0 today, €10 in 6 months from today, and
- Option B: €4 today, €0 in 6 months from today

Assuming the experiment participant chooses the less patient option "€4 today, €0 in 6 months from today".

How likely do you think the following reasons are for someone making such a decision?

| | Very unlikely | Unlikely | Maybe | Likely | Very likely |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| They are generally impatient. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| They are not sure if they can receive the money in half a year, for example, because they will no longer have a PayPal account. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| They actually wanted to choose "Get €0 today, €10 in half a year," but chose the other option because an irrelevant event prevented them from choosing what they actually wanted (e.g. their hand trembled, or they confused the order of radio buttons). | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Today they urgently need money to pay expenses such as food or rent. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| They are not sure if the study director would really pay them in half a year. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| They were not attentive and chose randomly. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Finally, please answer the following questions about yourself truthfully

How many alcoholic beverages did you consume on average per week, calculated over the last 12 months? (1 alcoholic drink = 0.2 liter beer, 0.1 liter wine, 1 shot of spirits or liquor)
[10 or more per week, 5-10 per week, 3-5 per week, 1-3 per week, less than 1 per week but some, none]

How often did you have 4 or more alcoholic beverages within a 2-hour period over the last 12 months?

[7 days per week, 5-6 days per week, 3-4 days per week, 2 days per week, 1 day per week, 2-3 days per month, 3-11 days over the last year, 1-2 days over the last year, never]

Sometimes people need to borrow money quickly and take out short-term, high-interest loans. Such loans include consumer loans of EUR 5000 or less with less than 1-year maturity, payday loans, pawn shop loans, or rent-to-own loans (but not credit card debt).

Do you have experience with short-term, high-interest loans?

[No, I've never taken out a loan like this before; Yes, I have taken such a loan in the past, but I don't do it regularly; Yes, I regularly take out such loans]

If you have taken out a short-term, high-interest loan (for example, payday loan or pawnbroking) in the past:

How did the repayment work? (If you have taken out several such loans or take them out regularly, please indicate what typically happens.)

[I repaid it in full on my next payday without taking out another loan immediately; I repaid it in full or in part on my next payday, but took up another loan to pay it; I held the loan longer than originally planned, but later repaid it without immediately taking out another loan; I held the loan longer than originally planned, but later paid it back and took out another loan to pay the other one; I was unable to pay it back and I went bankrupt with the loan; I've never taken out a loan like this before]

Which of the following categories describes you best? I am...

[severely underweight (BMI <16); underweight (BMI between 16 and 18.5); normal weight, on the lighter side (BMI between 18.5 and 21.7); normal weight, on the heavier side (BMI between 21.7 and 24.9); overweight (BMI between 24.9 and 29.9); severely overweight (BMI > 29.9); I prefer not to say]

[Subjects can click a button labelled 'calculate BMI'. If they do so, a window pops up prompting subjects to enter their weight and height. Upon clicking enter, the subjects can then view their BMI.]

Are you a smoker, or have you ever been a smoker? *[I am a non-smoker, and have never been a smoker; I now am a non-smoker, but I used to be a smoker; I am an occasional smoker; I am a smoker]*

How many cigarettes do you consume per day, based on the last 12 months (excluding e-cigarettes)?

[40 (2 packs) or more per day; Between 20 (1 pack) and 40 (2 packs) per day; Between 10 (1/2 pack) and 20 (1 pack) per day; Between 1 and 10 (1/2 pack) per day; I am a non-smoker]

What is your political orientation?

[left, center-left, left-of-center, centrist, right-of-center, center-right, right]

Memory test

As the final part of this study, you have the opportunity to earn an additional €2. These will be added to all your other payments via PayPal.

In the online part of this study you made a number of decisions about your bonus payment.

In this section we ask you to reproduce these decisions if you remember them.

It is **not** about what options you actually prefer now. It is about clicking on **the same** options as in the online part, even if you might prefer a different option now.

We will show you 4 lists of such decisions. If for all lists you click on the same options as in the online part of this study, we will add €2 to your PayPal payment today.

In each line, please select the SAME option you selected in the online part of this experiment (regardless of which option you currently prefer).

In the online part of this experiment I had chosen the following options:

I would rather have ...

| | | | |
|---|-----------------------|-----------------------|--|
| ...€X on the day of the laboratory part | <input type="radio"/> | <input type="radio"/> | ...€Y 1 month after the laboratory part |
| ...€X on the day of the laboratory part | <input type="radio"/> | <input type="radio"/> | ...€Y 2 months after the laboratory part |
| ...€X on the day of the laboratory part | <input type="radio"/> | <input type="radio"/> | ...€Y 3 months after the laboratory part |
| ...€X on the day of the laboratory part | <input type="radio"/> | <input type="radio"/> | ...€Y 4 months after the laboratory part |
| ...€X on the day of the laboratory part | <input type="radio"/> | <input type="radio"/> | ...€Y 5 months after the laboratory part |
| ...€X on the day of the laboratory part | <input type="radio"/> | <input type="radio"/> | ...€Y 6 months after the laboratory part |

In the online part of this experiment I had chosen the following options: I would rather have ...

| | | | |
|--|-----------------------|-----------------------|----------------------|
| ...€X with probability $p\%$ and €Y with probability $(1 - p)\%$ | <input type="radio"/> | <input type="radio"/> | ...€6 with certainty |
| ...€X with probability $p\%$ and €Y with probability $(1 - p)\%$ | <input type="radio"/> | <input type="radio"/> | ...€5 with certainty |
| ...€X with probability $p\%$ and €Y with probability $(1 - p)\%$ | <input type="radio"/> | <input type="radio"/> | ...€4 with certainty |
| ...€X with probability $p\%$ and €Y with probability $(1 - p)\%$ | <input type="radio"/> | <input type="radio"/> | ...€3 with certainty |
| ...€X with probability $p\%$ and €Y with probability $(1 - p)\%$ | <input type="radio"/> | <input type="radio"/> | ...€2 with certainty |
| ...€X with probability $p\%$ and €Y with probability $(1 - p)\%$ | <input type="radio"/> | <input type="radio"/> | ...€1 with certainty |

This is the end of this study

Thank you for your participation!

Your Payment

You will receive your showup payment of €4.50 in cash, and your base payment of €5 via PayPal. You will also receive the bonus payment below.

The computer has randomly determined that your bonus payment for this study is determined by ...

Your bonus payment therefore is €5

Your responses to the memory coincide with your choices in the online part. Therefore you will receive an additional €2.

Do you have any comments on this study?

Please click here if you wish to withdraw your data from this study. If you choose to do so, you will receive €1 for your participation in this study. You will not receive any other payment, and the decisions you have made in this experiment will not affect any future experiment participant.

I want to withdraw my data from the study

Now, please raise your hand.

Someone from the experiment staff will take care of your payment.

D.5 Vignette experiment

Subjects were shown the four policies in individually randomized order. Subjects were paid \$3 for completion, plus an additional \$0.25 for each of eight attention check questions (two per policy) they answered correctly.

[Horizontal lines represent screen breaks.]

Policy 1 of 4: Sugary drinks taxes in Melbourne, Australia

The next questions are all about Anne, a resident of Melbourne, Australia. She is 35 years old, 5 feet and 4 inches tall, and she weighs 190 pounds. According to a classification by the World Health Organization, Anne is thus moderately obese. Sugary drinks such as Coca Cola are a major contributor to the obesity epidemic, according to a study by Harvard University. Currently, Australia does not have a sugary drinks tax. Suppose the city of Melbourne therefore considers introducing a sugary drinks tax. If passed, the price of all sugar-sweetened beverages would double. The value added tax on all other goods would be lowered, so that the state would collect the same overall amount of taxes as without the change.

With the sugary drinks tax, people would consume fewer sugar-sweetened beverages. On the one hand, this would lower their body weight. On the other hand, they would less frequently enjoy the consumption of a good that gives them satisfaction and enjoyment.

[For a random half of subjects, the previous two sentences are presented in reverse order]

For this question, assume that if the tax is introduced, Anne will reduce her consumption of sugary drinks so that her weight permanently drops to 145 pounds (from the previous 190 pounds). Given Annes height, this is a normal weight, according to the World Health Organization.

If all residents of Melbourne were exactly like Anne, would you support or oppose the introduction of the tax?

[I would strongly support the tax, I would weakly support the tax, I would weakly oppose the tax, I would strongly oppose the tax]

How do you think Anne is affected overall if the tax is introduced?

[Anne will be much better off with the tax than without, Anne will be a little better off with the tax than without, Anne will be equally well off with the tax as without, Anne will be a little worse off with the tax than without, Anne will be much worse off with the tax than without]

Science does not have a definitive answer about how much the introduction of a sugary drinks tax will change Melbourne residents body weight. What do you believe are likely effects?

What do you believe is the chance that the tax will cause a typical moderately obese person to lose enough weight to be classified as merely overweight? I believe this is

[Extremely likely, Very likely, Somewhat likely, Somewhat unlikely, Very unlikely, Extremely unlikely]

A sugary drinks tax will not affect everyone equally, because some people are richer than others, some are heavier than others, some like sugary drinks more than others, and so on. On the left you see 10 tags labelled Random resident. Please sort the labels into the bins to show, from amongst ten randomly selected Melbourne residents, how many people you believe would be affected in what way.

[Subjects drag and drop ten tags labelled "Random resident" into three bins labeled "Better off", "Neither better nor worse off", "Worse off"]

Effect on whole society

If residents like Anne have a healthier weight, this affects the well-being of these residents. It also affects the general public. The reason is that people who have a healthier weight are less likely to get ill and cause medical costs. Health insurance in Australia is partly publicly provided. Hence, the less a person relies on it, the lower the costs she causes to the public.

Suppose the city of Melbourne asked for your opinion on the proposed sugary drinks tax. Please indicate your opinion. I would *[Strongly support the proposed sugary drinks tax, Weakly support the proposed sugary drinks tax, Weakly oppose the proposed sugary drinks tax, Strongly oppose the proposed sugary drinks tax]*

What determined your answer in the previous question? The well-being of those who change their sugary drinks consumption, or the effects on society at large (lower health costs)?

[Exclusively the change in well-being of those who change their sugary drinks consumption; Mostly the change in well-being of those who change their sugary drinks consumption; Both, but a little more the change in well-being of those who change their sugary drinks consumption; Both, but a little more the effects on society at large (lower health costs); Mostly the effects on society at large (lower health costs); Exclusively the effects on society at large (lower health costs)]

Questions for bonus payment About how tall is Anne?

[5 feet 0 inches, 5 feet 4 inches, 5 feet 8 inches, 6 feet 2 inches]

What effect would the tax have on the overall price of sugary drinks?

[It would increase one-and-a-half fold, It would increase two fold, It would increase two-and-a-half fold, It would increase three fold, It would increase three-and-a-half fold]

Policy 2 of 4: Alcohol taxes in London, UK

The next questions are all about Peter, an undergraduate student at Queen Mary University, London, UK. Like many undergraduate students, on one day of each weekend, Peter consumes five or more alcoholic drinks within two hours or less, a practice known as binge-drinking. The price of alcohol has a large influence on how much alcohol people consume. Suppose the United Kingdom considers increasing the alcohol tax, such that each unit of alcohol would become twice as expensive as it is today. The value added tax on all other goods would be lowered, so that the state would collect the same overall amount of taxes as without the change.

If the increased tax reduces alcohol consumption, this will have two effects. On the one hand, it will limit the unfavorable health effects of alcohol consumption. On the other hand, people will less frequently enjoy consuming something they like.

[For a random half of subjects, the previous two sentences are presented in reverse order]

For the following questions, assume that if the tax is introduced, Peter reduces his binge drinking from once a week to once a month.

If all residents of London were exactly like Peter, would you support or oppose the tax?

[I would strongly support the tax, I would weakly support the tax, I would weakly oppose the tax, I would strongly oppose the tax]

How do you think Peter is affected overall if the tax is introduced— [*Peter will be much better off with the tax than without, Peter will be a little better off with the tax than without, Peter will be equally well off with the tax as without, Peter will be a little worse off with the tax than without, Peter will be much worse off with the tax than without*]

Science does not have a definitive answer about how much the introduction of an alcohol tax will affect the frequency of binge drinking. What do you believe is the chance that the tax will reduce the frequency by which people like Peter binge-drink by at least half? I believe this is

[*Extremely likely, Very likely, Somewhat likely, Somewhat unlikely, Very unlikely, Extremely unlikely*]

An alcohol tax will not affect everyone equally, because some people are richer than others, some like to drink alcoholic drinks more than others, and so on. On the left you see 10 tags labelled random college student. Please sort the labels into the bins to show how many college students you believe would be affected in what way.

[*Subjects drag and drop ten tags labelled "Random resident" into three bins labeled "Better off", "Neither better nor worse off", "Worse off"*]

Effect on whole society

If college students like Peter binge-drink less frequently, this affects the well-being of these students. It also affects the general public. The reason is that binge-drinking college students sometimes cause trouble to others, for instance, by vomiting in public places, through vandalism, or harassing bystanders.

Suppose the city of London asked for your opinion on the proposed alcohol tax. Please indicate your opinion. I would

[*Strongly support the proposed alcohol tax, Weakly support the proposed alcohol tax, Weakly oppose the proposed alcohol tax, Strongly oppose the proposed alcohol tax*]

What determined your answer in the previous question? The well-being of those who change their alcohol consumption, or the effects on society at large (less vomit, vandalism, etc.)?

[*Exclusively the change in well-being of those who change their alcohol consumption; Mostly the change in well-being of those who change their alcohol consumption; Both, but a little more the change in well-being of those who change their alcohol consumption; Both, but a little more the effects on society at large (less vomit, vandalism, etc.); Mostly the effects on society at large (less vomit, vandalism, etc.); Exclusively the effects on society at large (less vomit, vandalism, etc.)*]

Questions for bonus payment

How often does Peter binge-drink?

[*Twice a week, Once a week, Twice a month, Once a month, Once every other month*]

What effect would the tax have on the overall price of alcohol?

[*It would increase one-and-a-half fold, It would increase two fold, It would increase two-and-a-half fold, It would increase three fold, It would increase three-and-a-half fold*]

Policy 3 of 4: Restrictions on payday loans in Christchurch, New Zealand

The next questions are all about James, a 40 year old janitor at a school in Christchurch, New Zealand. James receives his paycheck monthly. In the middle of the month, James is running very tight on money. Suddenly, a need comes up that James considers very important. James considers taking out \$500 from a payday loan store. If he does so, he will have to repay the \$500

he has taken out, in addition to \$90 in interest and fees, two weeks later. Currently, New Zealand does not have any restrictions on the interest and fees that payday lenders can charge their clients. New Zealand is considering introducing tight restrictions on payday lending. Those restrictions would consist of upper limits on the interest rates and fees that payday lenders can charge. Such regulation would have two effects. First, people can get trapped in debt cycles in which they take up loans to pay back previous loans, at ever increasing interest and fee payments. Some experts argue that restrictions on payday lending make debt cycles less likely. Second, fewer people will be able to get a payday loan, because some payday loan shops may go out of business. Hence, some people who would genuinely benefit from a payday loan may no longer be able to obtain them.

[For a random half of subjects, the previous two arguments are presented in reverse order]

Suppose regulation is introduced such that James will be unable to get the payday loan of \$500 for a cost of \$90 in interest and fees two weeks later. Suppose that James will also be unable to borrow that money from anywhere else.

If all residents of New Zealand were exactly like James, would you support or oppose the introduction of the restrictions?

[I would strongly support the restrictions (so loans become unavailable), I would weakly support the restrictions (so loans become unavailable), I would weakly oppose the restrictions (so loans remain available), I would strongly oppose the restrictions (so loans remain available)]

How do you think James is affected if the regulation is introduced?

[James will be much better off if he cannot get the loan, James will be a little better off if he cannot get the loan, James will be just as well off if he can get the loan as if he cannot get it, James will be a little better off if he can get the loan, James will be a much better off if he can get the loan]

Science does not have a definitive answer about exactly how much the introduction of payday loan regulation limits individuals ability to obtain high-cost, short-term credit. The reason is that even people they cannot get a payday loan, they may find alternatives, such as pawn shops, bank overdrafts, or asking friends and family. All of these options may also cost much in interest and fees or damaged social relationships, and bear a risk of trapping people in debt cycles.

What do you think are likely effects? I believe that if James can no longer get a payday loan, the chance that he will get a loan from some other place at similar costs with similar risks is

[Extremely high (>90%), Very high (75% - 90%), Somewhat high (50% - 75%), Somewhat low (25%-50%), Very low (10%-20%), Extremely low (< 10%)]

Restrictions on payday lending will not affect everyone equally, because people differ in their reasons for taking out these loans. On the left you see 10 tags labelled Random resident. Please sort the labels into the bins to show how many people like James (who would otherwise get a payday loan) you believe would be affected in what way if payday loans were no longer available.

[Subjects drag and drop ten tags labelled "Random resident" into three bins labeled "Better off", "Neither better nor worse off", "Worse off"]

Effect on whole society

If workers like James can no longer take out payday loans, this affects these workers. It also affects the general public, for instance by changing the probability that people go bankrupt or become homeless. Suppose the country of New Zealand asked for your opinion on the proposed regulation to limit the availability of payday loans. Please indicate your opinion. I would

[Strongly support the proposed regulation, Weakly support the proposed regulation, Weakly oppose the proposed regulation, Strongly oppose the proposed regulation]

What determined your answer in the previous question? The well-being of those who change their borrowing behavior, or the effects on society at large?

[Exclusively the change in well-being of those who change their borrowing behavior; Mostly the change in well-being of those who change their borrowing behavior; Both, but a little more the change in well-being of those who change their borrowing behavior; Both, but a little more the effects on society at large; Mostly the effects on society at large; Exclusively the effects on society at large]

Questions for bonus payment

If James took out a payday loan of \$500 today, how much would he have to repay in total (including interest and fees) in two weeks?

[\$500 - \$600 in steps of \$10]

What line of work is James in?

[Factory worker, Farmer, Janitor, Truck driver, Server at a restaurant, Musician]

Policy 4 of 4: Minimal retirement savings requirements in Dublin, Ireland

The next questions are all about Frank, a 30 years old resident of Dublin, Ireland. Frank's income is EUR2900 per month, which is about USD3300 per month. Currently, Frank does not save anything for retirement. Research finds that in countries in which there is no requirement that people save for retirement, such as the US, only about 1 in 5 working age adults have a retirement savings plan, and that many will start retirement with savings far lower than needed to maintain their standard of living when transitioning into retirement. Ireland currently does not have a minimum retirement savings mandate. For this question, suppose that Ireland considers introducing a law that every working-age adult must save at least 10% of their income for their retirement. Financial advisors recommend that everyone save between 10% and 30% of their income for retirement, depending on their age. If the policy is introduced, Frank would be forced to pay at least \$330 per month into a retirement savings account. Upon retirement, he would receive a constant monthly pension for the rest of his life. With the policy could expect to experience only a moderate drop in his standard of living when transitioning into retirement.

Some therefore argue that people should be forced to save some minimal amount for retirement to ensure nobody experiences a large drop in their standard of living upon retirement. Others argue that people should be free to decide how and when to spend or save their money.

[For a random half of subjects, the previous two arguments are presented in reverse order]

Suppose the law is passed that requires Frank to save at least 10% of his income for retirement (\$330 of the \$3300 he earns each month). If all residents of Ireland were exactly like Frank, would you support or oppose the introduction of the minimal retirement savings law?

[I would strongly support the minimal retirement savings law, I would weakly support the minimal retirement savings law, I would weakly oppose the minimal retirement savings law, I would strongly oppose the minimal retirement savings law]

How do you think Frank is affected if the regulation is introduced?

[Overall, Frank will be much better off if he is forced to save; Overall, Frank will be a little better off if he is forced to save; Overall, Frank will be just as well off if he is forced to save as if he is not; Overall, Frank will be a little worse off if he is forced to save; Overall, Frank will be much worse off if he is forced to save]

Minimal retirement savings laws will not affect everyone equally, because people differ in their financial backgrounds. Some are in stable jobs, while others may be in a period of their lives in which they earn unusually little or unusually much. On the left

you see 10 tags labelled Random resident. Please sort the labels into the bins to show how many people in Ireland you believe would be affected in what way if a minimal compulsory retirement savings rate of 10% were introduced.

[Subjects drag and drop ten tags labelled "Random resident" into three bins labeled "Better off", "Neither better nor worse off", "Worse off"]

Effect on whole society

If workers like Frank save differently for retirement, this affects the well-being of these workers. It also affects the general public, for instance by changing the probability that people go bankrupt or become homeless. Suppose the Republic of Ireland asked for your opinion on the proposed minimal retirement savings law. Please indicate your opinion. I would

[Strongly support the law that forces workers to save 10% of their income for retirement, Weakly support the law that forces workers to save 10% of their income for retirement, Weakly oppose the law that forces workers to save 10% of their income for retirement, Strongly oppose the law that forces workers to save 10% of their income for retirement]

What determined your answer in the previous question? The well-being of those who change their saving behavior, or the effects on society at large (reliance on social security)?

[Exclusively the change in well-being of those who change their saving behavior; Mostly the change in well-being of those who change their saving behavior; Both, but a little more the change in well-being of those who change their saving behavior; Both, but a little more the effects on society at large; Mostly the effects on society at large; Exclusively the effects on society at large]

Questions for bonus payment

What is Frank's approximate monthly income (in USD)

[\$1000 - \$10,000 in steps of \$1000]

If the minimal retirement savings law is introduced, what percentage of his earnings will each resident have to put away, at least, each month?

[1%, 2.5%, 5%, 7.5%, 10%, 12.5%, 15%, 17.5%, 20%, 25%, 30%]

Questions about yourself

As the last part of this survey, we would like to ask 22 questions about yourself. Please answer truthfully.

What is your age?

[18 90 in steps of 1 year]

What is your gender?

[male, female, other (e.g. non-binary)]

How do you feel about your own alcohol consumption?

[I am perfectly comfortable with my alcohol consumption; I am fairly comfortable with my alcohol consumption; I feel neutral about my alcohol consumption; I am fairly uncomfortable with my alcohol consumption; I am totally uncomfortable with my

alcohol consumption]

How do you feel about your use of short-term credit (such as payday loans)?

[I am perfectly comfortable with my use of short-term credit; I am fairly comfortable with my use of short-term credit; I feel neutral about my use of short-term credit; I am fairly uncomfortable with my use of short-term credit; I am totally uncomfortable with my use of short-term credit]

How do you feel about your retirement savings choices?

[I am perfectly comfortable with my retirement savings choices; I am fairly comfortable with my retirement savings choices; I feel neutral about my retirement savings choices; I am fairly uncomfortable with my retirement savings choices; I am totally uncomfortable with my retirement savings choices]

How do you feel about your body weight?

[I am perfectly comfortable with my body weight; I am fairly comfortable with my body weight; I feel neutral about my body weight; I am fairly uncomfortable with my body weight; I am totally uncomfortable with my body weight]

How many alcoholic beverages did you consume on average per week, calculated over the last 12 months? (1 alcoholic drink = 0.2 liter beer, 0.1 liter wine, 1 shot of schnapps or liqueur)

[10 or more per week, 5-10 per week, 3-5 per week, 1-3 per week, less than 1 per week but some, none]

How often have you had 4 or more alcoholic beverages within a 2-hour period over the last 12 months?

[For males, "4 or more" is replaced by "5 or more"]

[7 days per week, 5-6 days per week, 3-4 days per week, 2 days per week, 1 day per week, 2-3 days per month, 3-11 days over the last year, 1-2 days over the last year, never]

What is your body height?

Feet *[Subject can enter any integer]*

Inches *[Subject can enter any integer]*

What is your body weight (in pounds)? *[Subject can enter any integer]*

How would you describe yourself?

[Underweight, Healthy weight, Overweight, Moderately obese, Severely obese, prefer not to answer]

Please indicate your current household income in U.S. dollars

[Under \$10,000, \$10,000 - \$19,999, \$20,000 - \$29,999, \$30,000 - \$39,999, \$40,000 - \$49,999, \$50,000 - \$74,999, \$75,000 - \$99,999, \$100,000 - \$150,000, Over \$150,000, prefer not to answer]

What is your credit card debt (across all credit cards you have)?

[\$0-\$500, \$500-\$1000, \$1000-\$2500, \$2500-\$5000, \$5000-\$7500, \$7500-\$10,000, \$10,000-\$20,000, \$20,000-\$50,000, \$50,000 or more, prefer not to answer]

Have you ever taken a payday loan?

[No, never; Yes, once; Yes, a couple of times; Yes, often; prefer not to answer]

Have you ever been in a debt cycle (getting into debt in order to repay other debt)?

[No, never; Yes, once; Yes, a couple of times; Yes, often; prefer not to answer]

What are your total retirement savings?

[\$0, \$0 - \$10,000, \$10,000-\$25,000, \$25,000-\$50,000, \$50,000-\$100,000, \$100,000-\$200,000, \$200,000-\$300,000, \$300,000-\$400,000, \$400,000-\$500,000, \$500,000-\$750,000, \$750,000-\$1,000,000, more than \$1,000,000, I do not know, prefer not to say]

Approximately what percentage of your income do you currently save for retirement each month?

[0%, 0%-2.5%, 2.5%-5%, 5%-7.5%, 7.5%-10%, 10%-15%, 15%-20%, 20%-30%, more than 30%]

Do you currently work for a company that offers a retirement savings plan (401k)?

[Yes, No]

Where do you stand politically?

[Conservative; Leaning conservative; Centrist; Leaning liberal; Liberal]

Please indicate the highest level of education you completed.

[Elementary School, Middle School, High School or equivalent, Vocational/Technical School (2 year), Some College, College Graduate (4 year), Master's Degree (MS), Doctoral Degree (PhD), Professional Degree (MD, JD, etc.)]

Which of the following best describes the area you live in?

[Urban, Suburban, Rural]

Please choose the option that best describes your situation

[I am unemployed, I am employed part-time, I am employed full-time]