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**“AJAE appendix for ‘Would you choose your preferred option? Comparing choice  
and recoded ranking experiments”**

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“Note: The material contained herein is supplementary to the article named in the title  
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## **Differences between the *choices* and *first rankings* of each treatment**

Table 1 shows the results of the comparison between the proportion of respondents that *chose* or *ranked first* a treatment (alternative) out of the 17 that we used in our experiment. The  $\chi^2$ -tests show that for 15 treatments we cannot reject the null hypothesis of statistically similar percentage of times a treatment is chosen/ranked first (at the 5% level) (table 1).

[Table 1]

## **Nested logit and random parameter logit with socioeconomic characteristics**

In this section we present (i) a nested logit (NL) including socioeconomic characteristics in the election among branches and interacting with the attributes of the elemental alternatives and (ii) a random parameters logit (RPL) (Layton 2000) with socioeconomic characteristics interacting with the attributes. These models check if the results remain the same when we allow for heterogeneity. The RPL also relaxes the assumption of independence of the eight choices made by each respondent.

In the RPL we include interactions between the *ASC* and some socioeconomic variables. However, since the *ASC* captures the mean effect of the unobserved factors in the error term it is difficult to test hypothesis regarding this term (Blamey et al. 2000). As in the NL model without socioeconomic characteristics, *ASCs* for reforestation alternatives were not significant in the NL model with socioeconomic characteristics and are not included (see next section).

The socioeconomic characteristics (table 3 in the article) used in the branches in the NL and interacting with the *ASC* in the RPL are the family income (*INC*), the age

(*AGE*) of the respondent and a dummy variable (*CAD*) that takes value 1 if the respondent is from the *Cádiz* province, where the Alcornocales Natural Park (ANP) is located (value 0 otherwise). Two dummy variables interact with the attributes: (i) the variable *REA* takes value 1 if the main reason of the respondent for visiting the ANP was related with active tourism (hiking, biking, climbing) (value 0 otherwise); and (ii) the variable *SUS* takes value 1 if the respondent knows a close substitute to the ANP (value 0 otherwise). The remaining socioeconomic variables presented in table 3 of the article were not employed because of correlation problems.

We have estimated models (i) including all possible variables; (ii) including variables which were significant either in the choice or in the recoded ranking regressions; and (iii) including only the variables significant in both the choice and the recoded ranking regressions. We present in detail only the regressions for the models described in (ii) above, since they avoid unnecessary information from common non-significant variables and allow for potential socioeconomic differences. For the welfare measure analysis, we compare the models described in (iii) because they allow for a homogeneous comparison.

For comparing the parameter vectors in the RPL models we can only conduct a standard Likelihood Ratio test because the likelihood function in these models is not globally concave and quite erratic (Lusk and Schroeder 2004).

In table 2, we present the regression of the NL for the choice and the recoded ranking and the Likelihood Ratio test result. Most of the variables are significant in both models with the same sign and we cannot reject the hypothesis of equal parameter vectors. Although not shown in table 2, we also cannot reject the null hypothesis of the Likelihood Ratio test for the model with all possible variables ( $\chi^2$  (d. f. = 21) = 27.402)

and for the model only with the variables significant in both the choice and the recoded ranking ( $\chi^2$  (d. f. = 14) = 15.576).

Table 3 shows the welfare measures and the results of the comparison tests. As in the base models, most welfare measures are statistically equivalent, including the new ones derived from the interaction of the attributes and the socioeconomic variables.

**[Table 2 and 3]**

For the RPL model (table 4), the results of the comparison between models are fairly similar to the ones obtained in the NL. The standard Likelihood Ratio test cannot reject the null hypothesis (table 4). In table 5 we show the welfare measures and the results of the comparison tests for these models, which are similar to the obtained in the comparison of the NL models.

**[Table 4 and 5]**

**Nested logit (NL) models with an alternative specific constant**

In this section we present two additional NL models with an alternative specific constant (*ASC*) for reforestation alternatives. Table 6 shows the NL models without socioeconomic variables and table 7 the NL models with socioeconomic variables. Since the *ASCs* are not significant we did not include these models in the main text and did not perform additional comparison tests.

**[Table 6 and 7]**

**Testing effects**

In this section we present the statistical details of the models that try to detect the influence of different effects. We show the regressions, the Likelihood Ratio test and the welfare measures tests for the comparison between sub-samples that isolate respondents who could have been affected by a concrete effect. These tests are done only for the NL described in the article since the results of the comparison remains strongly similar irrespective of the specification used.

The models identifying “learning” and “fatigue” effects (called C4<sub>L</sub> and C4<sub>F</sub> respectively for the choice data and RC4<sub>L</sub> and RC4<sub>F</sub> for the recoded ranking data) show that all attributes are statistically significant at the 1% level with the expected sign (table 8). The Likelihood Ratio tests reported in table 9 do not reject the hypothesis of statistically equal parameter vectors in both comparisons. Table 9 also reports the Likelihood Ratio tests for the sub-sample models described below.

**[Table 8 and 9]**

The results for the welfare measures comparisons are found in table 10 for the C4<sub>L</sub> and the RC4<sub>L</sub> models and in table 11 for the C4<sub>F</sub> and the RC4<sub>F</sub> models. For the parametric measures, the t-tests that compare C4<sub>L</sub> and RC4<sub>L</sub> show little significant differences (only at the 10% level). For the bootstrapping results, the complete combinatorial tests show little significant differences in both cases.

**[Table 10 and 11]**

Using the four follow-up statements (see table 12) we created sub-samples for choice and for recoded ranking data and compare them for testing the effects referred in the article. For the first follow-up, we compared sub-samples made with respondents that scored it with 1, 2 or 3, detecting an “information” effect (models C<sub>Q1</sub> and RC<sub>Q1</sub>). For the second follow-up, we compared sub-samples made with individuals that scored it with 3, 4 or 5, checking for a “difficulty” effect (models C<sub>Q2</sub> and RC<sub>Q2</sub>). For the third

follow-up, we compared sub-samples made with those who scored it with 3, 4 or 5 checking an effect associated with the number of choice sets presented to each respondent (“choice sets” effect) (models C<sub>Q3</sub> and RC<sub>Q3</sub>). For the fourth follow-up, we compared sub-samples made with those that scored this statement with 3, 4 or 5 checking for a “response effort” effect (models C<sub>Q4</sub> and RC<sub>Q4</sub>). Table 12 shows the scores given to the follow-ups (from 1 (totally disagree) to 5 (totally agree)) and the  $\chi^2$  statistics for testing differences. In all cases we cannot reject the hypothesis of similar scores.

The results of the regressions estimated with the sub-samples made using the follow-ups are reported in table 13. The only difference with the regressions obtained using the whole samples is that the attribute *REC* in the RC<sub>Q1</sub> model is only significant at the 10% level. However, we are not able to discern whether this is caused by the “information” effect or by the reduced observations of RC<sub>Q1</sub> (732 observations), with the consequent decrease of its explanatory power. Nonetheless, this also happens in C<sub>Q1</sub> (776 observations), where no decrease in explanatory power is observed.

#### [Table 12 and 13]

The Likelihood Ratio tests (see table 9; C<sub>Q1</sub> versus RC<sub>Q1</sub>, C<sub>Q2</sub> versus RC<sub>Q2</sub>, C<sub>Q3</sub> versus RC<sub>Q3</sub> and C<sub>Q4</sub> versus RC<sub>Q4</sub>) state that in the models hypothetically affected by the “difficulty” effect (C<sub>Q2</sub> versus RC<sub>Q2</sub>) H<sub>B</sub> is rejected. This implies that the difference resides in the scale parameter and not in the taste parameters.

Table 14 shows the parametric and bootstrapping results of the comparison between the welfare measures of C<sub>Q1</sub> and RC<sub>Q1</sub> models. We found little differences and only in the complete combinatorial tests. Table 15 presents the same results for C<sub>Q2</sub> and RC<sub>Q2</sub> models, finding also little differences in the complete combinatorial tests and one in the parametric t-test but only at the 10% level.

**[Table 14 and 15]**

Tables 16 and 17 show the parametric and bootstrapping welfare measures comparisons for C<sub>Q3</sub> and RC<sub>Q3</sub> and for C<sub>Q4</sub> and RC<sub>Q4</sub> models respectively. We found that only the t-test and the complete combinatorial test yield some statistically significant difference and most of them at the 10% level.

**[Table 16 and 17]**

Thus, as in the comparison of the whole samples, there is almost no difference between the results of a choice and a recoded ranking when we test for the four effects analyzed with the follow-up statements.

**References**

- Blamey, R.K., J.W. Bennet, J.J. Louviere, M.D. Morrison, and J.C. Rolfe. 2000. "A Test of Policy Labels in Environmental Choice Modelling Studies." *Ecological Economics* 32(2):269-286.
- Layton, D. F. 2000. "Random Coefficient Models for Stated Preference Surveys." *Journal of Environmental Economics and Management* 40(1):21-36.
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## TABLES

**Table 1. Proportion of Respondents that *Chose* or *Ranked First* each Treatment.**

Treatment	Choice (%)	First ranking (%)	$\chi^2$	<i>p-value</i>
1	28.67	26.67	0.1423	0.7060
2	44.44	42.86	0.0610	0.8050
3	52.00	46.89	2.7184*	0.0992
4	44.22	45.33	0.9880	0.3202
5	79.33	74.89	2.0655	0.1507
6	66.67	64.81	0.2698	0.8695
7	24.00	30.22	2.3369	0.1263
8	54.67	57.37	1.0952	0.2953
9	21.78	23.78	0.0066	0.9354
10	50.44	49.56	0.4378	0.5082
11	35.11	30.29	0.5861	0.4440
12	63.78	61.16	6.9645***	0.0083
13	58.44	62.58	0.0416	0.8384
14	38.22	39.20	0.9793	0.3224
15	47.33	48.44	0.1690	0.6810
16	63.78	66.89	0.7050	0.4011
17	3.39	3.64	66.1960***	0.0000

Note: For the hypothesis of no significant difference between the choice and the first ranking for each treatment, the  $\chi^2$  statistic for 1 degree of freedom at the 5% level is 3.841. Asterisks (e.g., \*, \*\*, \*\*\*) denote significance at the 10%, 5%, and 1% level, respectively.

**Table 2. Choice and Recoded Ranking Nested Logit with Socioeconomic Variables**

Attribute parameters	Choice model	Recoded ranking model	
<i>BIO</i>	0.2617 <sup>***</sup> (0.0349)	0.3384 <sup>***</sup> (0.0341)	
<i>TEC</i>	0.3118 <sup>***</sup> (0.0431)	0.1648 <sup>***</sup> (0.0442)	
<i>REC</i>	0.2680 <sup>***</sup> (0.0831)	0.2178 <sup>***</sup> (0.0845)	
<i>EMP</i>	0.0108 <sup>***</sup> (0.0012)	0.0129 <sup>***</sup> (0.0012)	
<i>SUR</i>	0.0155 <sup>***</sup> (0.0014)	0.0147 <sup>***</sup> (0.0014)	
<i>BID</i>	-0.0194 <sup>***</sup> (0.0017)	-0.0147 <sup>***</sup> (0.0017)	
<i>BIO*REA</i>	-0.0147 (0.0442)	-0.1168 <sup>***</sup> (0.0394)	
<i>BIO*SUS</i>	0.1008 <sup>**</sup> (0.0409)	0.0290 (0.0377)	
<i>TEC*REA</i>	0.1902 <sup>***</sup> (0.0579)	0.1395 <sup>**</sup> (0.0554)	
<i>TEC*SUS</i>	-0.0885 <sup>*</sup> (0.0531)	0.0463 (0.0525)	
<i>REC*REA</i>	-0.4141 <sup>***</sup> (0.1094)	-0.2028 <sup>*</sup> (0.1051)	
<i>REC*SUS</i>	0.2269 <sup>**</sup> (0.1015)	0.2846 <sup>***</sup> (0.0998)	
<i>IV (<math>\alpha_{REF}</math>)<sup>a</sup></i>	0.9251 <sup>***</sup> (0.1349)	1.2407 <sup>***</sup> (0.1408)	
<b>Branch parameters</b>			
<i>INC</i>	0.0008 <sup>***</sup> (0.0002)	0.0005 <sup>***</sup> (0.0001)	
<i>PRO</i>	1.1123 <sup>***</sup> (0.2833)	0.4884 <sup>***</sup> (0.1835)	
<i>AGE</i>	-0.0230 <sup>***</sup> (0.0073)	-0.0252 <sup>***</sup> (0.0046)	
N	3,464	3,380	
LogL ( $\beta$ )	-2,476.867	-2,463.292	
LogL (0)	-4,717.560	-4,600.418	
$\rho^2$	0.474	0.463	
Likelihood Ratio tests <sup>b</sup>	H <sub>A</sub> : $\beta^C = \beta^{RC}$	H <sub>B</sub> : $\lambda^C = \lambda^{RC}$	Reject H <sub>1</sub> : $\beta\lambda^C = \beta\lambda^{RC}$ ?
$\chi^2$ (C vs RC)	23.258	0.394	No

Note: C: choice model; RC: recoded ranking model; Standard errors are shown in brackets; N: number of observations; IV ( $\alpha_{REF}$ ): inclusive value parameter of the REF branch; Asterisks (e.g., \*, \*\*, \*\*\*) denote significance at the 10%, 5%, and 1% level, respectively.

<sup>a</sup> Although  $IV(\alpha_{REF}) > 1$ , the Hurriges and Kling (1996) condition for local utility maximisation is fulfilled.

<sup>b</sup> For the hypothesis H<sub>A</sub>, the  $\chi^2$  statistic for 17 degrees of freedom at the 5% level is 27.587. For the hypothesis H<sub>B</sub>, the  $\chi^2$  statistic for 1 degree of freedom at the 5% level is 3.841.

**Table 3. Welfare Measures From Choice and Recoded Ranking Nested Logit Models with Socioeconomic Variables. Parametric and Bootstrapping**

Measures. Tests of the Equality of Mean Values									
Attributes	Parametric				Bootstrapping				Complete combinatorial
	C	RC	Nonoverlapping	<i>t-test</i>	C	RC	Nonoverlapping	<i>t-test</i>	
	Mean	Mean	<i>p-value</i>	<i>p-value</i>	Mean	Mean	<i>p-value</i>	<i>p-value</i>	
<i>BIO</i>	16.11 <sup>***</sup> [12.62, 19.60]	21.49 <sup>***</sup> [16.10, 26.88]	0.238	0.101	16.24 <sup>***</sup> [13.00, 20.30]	21.78 <sup>***</sup> [16.78, 28.62]	0.238	0.122	0.047 <sup>**</sup>
<i>TEC</i>	13.58 <sup>***</sup> [9.82, 17.34]	12.88 <sup>***</sup> [9.08, 17.68]	0.881	0.822	13.70 <sup>***</sup> [10.26, 17.61]	13.05 <sup>***</sup> [8.67, 18.20]	0.874	0.839	0.413
<i>REC</i>	13.03 <sup>***</sup> [4.43, 21.63]	15.59 <sup>***</sup> [3.99, 27.19]	0.810	0.728	13.22 <sup>***</sup> [4.36, 21.54]	15.92 <sup>***</sup> [4.12, 27.33]	0.768	0.720	0.356
<i>EMP</i>	0.55 <sup>***</sup> [0.41, 0.69]	0.87 <sup>***</sup> [0.63, 1.11]	0.099 <sup>*</sup>	0.021 <sup>**</sup>	0.56 <sup>***</sup> [0.42, 0.73]	0.88 <sup>***</sup> [0.66, 1.17]	0.108	0.036 <sup>**</sup>	0.011 <sup>**</sup>
<i>SUR</i>	0.80 <sup>***</sup> [0.62, 0.98]	0.99 <sup>***</sup> [0.72, 1.26]	0.424	0.254	0.81 <sup>***</sup> [0.63, 1.03]	1.01 <sup>***</sup> [0.75, 1.36]	0.442	0.267	0.124
<i>TEC*REA</i>	9.66 <sup>***</sup> [3.62, 15.70]	9.85 <sup>**</sup> [2.13, 17.57]	0.984	0.970	9.60 <sup>***</sup> [3.41, 16.05]	9.82 <sup>**</sup> [1.86, 18.10]	0.982	0.966	0.513
<i>REC*REA</i>	-21.51 <sup>***</sup> [-33.03, -9.99]	-17.18 <sup>**</sup> [-31.57, -2.79]	0.749	0.645	-21.76 <sup>***</sup> [-33.96, -10.35]	-17.54 <sup>**</sup> [-33.03, -33.31]	0.756	0.664	0.670
<i>REC*SUS</i>	13.09 <sup>**</sup> [2.66, 23.52]	19.25 <sup>***</sup> [5.45, 33.05]	0.624	0.485	13.01 <sup>**</sup> [2.82, 24.21]	19.26 <sup>***</sup> [6.07, 34.52]	0.616	0.486	0.760
<i>HSMIN</i>	21.87 <sup>***</sup> [15.54, 28.20]	38.00 <sup>***</sup> [27.49, 48.51]	0.062 <sup>*</sup>	0.011 <sup>**</sup>	21.93 <sup>***</sup> [16.05, 29.52]	38.39 <sup>***</sup> [28.50, 52.01]	0.064 <sup>*</sup>	0.015 <sup>**</sup>	0.004 <sup>***</sup>
<i>HSMAX</i>	183.65 <sup>***</sup> [149.41, 217.89]	245.96 <sup>***</sup> [190.47, 301.45]	0.174	0.061 <sup>*</sup>	184.92 <sup>***</sup> [154.25, 225.86]	249.08 <sup>***</sup> [199.47, 320.93]	0.176	0.082 <sup>*</sup>	0.027 <sup>**</sup>

Note: C: choice model; RC: ranking recoded as a choice model; Lower and upper bounds of the confidence interval (95%) are shown in brackets; Asterisks (e.g., \*, \*\*, \*\*\*) denote significance at the 10%, 5%, and 1% level, respectively.

**Table 4. Choice and Recoded Ranking Random Parameters Logit with Socioeconomic Variables**

Attribute parameters	Choice model	Recoded ranking model
<i>BIO</i>	0.4329*** (0.0715)	0.4702*** (0.0653)
<i>TEC</i>	0.4417*** (0.0699)	0.2557*** (0.0463)
<i>REC</i>	0.4555*** (0.1397)	0.3065*** (0.1175)
<i>EMP</i>	0.0169*** (0.0024)	0.0167*** (0.0020)
<i>SUR</i>	0.0282*** (0.0040)	0.0217*** (0.0029)
<i>BID</i>	-0.0279*** (0.0035)	-0.0182*** (0.0024)
<i>BIO*REA</i>	-0.0221 (0.0660)	-0.1477*** (0.0558)
<i>BIO*SUS</i>	0.1566** (0.0631)	0.0331 (0.0514)
<i>TEC*REA</i>	0.3018*** (0.0998)	0.1951*** (0.0739)
<i>REC*REA</i>	-0.5716*** (0.1769)	-0.2476* (0.1438)
<i>REC*SUS</i>	0.3209** (0.1600)	0.3594*** (0.1380)
<i>ASC*INC</i>	0.0010*** (0.0002)	0.0008*** (0.0001)
<i>ASC*PRO</i>	1.3511*** (0.2688)	0.8380*** (0.2176)
<i>ASC*AGE</i>	-0.0349*** (0.0089)	-0.0257*** (0.0069)
Standard Deviation Parameters		
<i>BIO</i>	0.4892*** (0.1332)	0.3659*** (0.1075)
<i>TEC</i>	0.8178*** (0.1935)	0.2553*** (0.2720)
<i>REC</i>	1.2098*** (0.3587)	1.0251*** (0.3075)
<i>SUR</i>	0.0413*** (0.0079)	0.0290*** (0.0067)
N	3,464	3,380
LogL ( $\beta$ )	-2,459.206	-2,456.187
LogL (0)	-3,805.593	-3,713.310
$\rho^2$	0.352	0.337
Likelihood Ratio tests <sup>a</sup>	H <sub>1</sub> : $\beta\lambda^C = \beta\lambda^{RC}$	Reject H <sub>1</sub> : $\beta\lambda^C = \beta\lambda^{RC}$ ?
$\chi^2$ (C vs RC)	26.954	No

Note: C: choice model; RC: recoded ranking model; Standard errors are shown in brackets; N: number of observations; Asterisks (e.g., \*, \*\*, \*\*\*) denote significance at the 10%, 5%, and 1% level, respectively.

<sup>a</sup> For the hypothesis H<sub>1</sub>, the  $\chi^2$  statistic for 18 degrees of freedom at the 5% level is 27.869.

**Table 5. Welfare Measures From Choice and Recoded Ranking Random Parameters Logit Models with Socioeconomic Variables. Parametric and Bootstrapping Measures. Tests of the Equality of Mean Values**

Attributes	Parametric				Bootstrapping				Complete combinatorial
	C	RC	Nonoverlapping	<i>t-test</i>	C	RC	Nonoverlapping	<i>t-test</i>	
	Mean	Mean	<i>p-value</i>	<i>p-value</i>	Mean	Mean	<i>p-value</i>	<i>p-value</i>	
<i>BIO</i>	18.25 <sup>***</sup> [14.02, 22.48]	23.66 <sup>***</sup> [17.27, 30.05]	0.322	0.167	18.34 <sup>***</sup> [14.19, 23.09]	23.87 <sup>***</sup> [17.77, 31.65]	0.326	0.184	0.085 <sup>*</sup>
<i>TEC</i>	14.92 <sup>***</sup> [10.76, 19.08]	13.70 <sup>***</sup> [8.56, 18.84]	0.803	0.717	14.94 <sup>***</sup> [11.08, 19.35]	13.76 <sup>***</sup> [9.05, 19.43]	0.826	0.732	0.361
<i>REC</i>	13.92 <sup>***</sup> [4.55, 23.29]	17.81 <sup>***</sup> [5.11, 30.51]	0.734	0.629	13.64 <sup>***</sup> [4.77, 23.34]	17.50 <sup>***</sup> [5.34, 31.08]	0.762	0.645	0.329
<i>EMP</i>	0.60 <sup>***</sup> [0.44, 0.76]	0.90 <sup>***</sup> [0.65, 1.15]	0.162	0.049 <sup>**</sup>	0.60 <sup>***</sup> [0.45, 0.77]	0.91 <sup>***</sup> [0.68, 1.21]	0.150	0.055 <sup>*</sup>	0.021 <sup>**</sup>
<i>SUR</i>	0.99 <sup>***</sup> [0.74, 1.24]	1.17 <sup>***</sup> [0.84, 1.50]	0.562	0.400	0.99 <sup>***</sup> [0.75, 1.27]	1.17 <sup>***</sup> [0.86, 1.57]	0.590	0.418	0.207
<i>TEC*REA</i>	10.13 <sup>***</sup> [3.76, 16.50]	11.21 <sup>***</sup> [3.12, 19.30]	0.889	0.837	10.14 <sup>***</sup> [3.96, 16.61]	11.25 <sup>***</sup> [3.50, 19.40]	0.890	0.830	0.419
<i>REC*REA</i>	-21.23 <sup>***</sup> [-33.70, -8.76]	-16.98 <sup>**</sup> [-32.82, -1.14]	0.772	0.679	-21.09 <sup>***</sup> [-34.48, -9.67]	-16.85 <sup>**</sup> [-33.82, -1.91]	0.760	0.673	0.333
<i>REC*SUS</i>	14.22 <sup>**</sup> [2.89, 25.55]	19.97 <sup>**</sup> [4.96, 34.98]	0.675	0.549	14.61 <sup>**</sup> [3.58, 27.06]	20.56 <sup>**</sup> [6.13, 37.71]	0.682	0.547	0.276
<i>HSMIN</i>	25.80 <sup>***</sup> [18.39, 33.21]	41.94 <sup>***</sup> [29.81, 54.07]	0.107	0.029 <sup>**</sup>	25.99 <sup>***</sup> [18.78, 33.94]	42.38 <sup>***</sup> [31.15, 56.24]	0.096 <sup>*</sup>	0.031 <sup>**</sup>	0.011 <sup>**</sup>
<i>HSMAX</i>	210.13 <sup>***</sup> [167.89, 252.37]	270.99 <sup>***</sup> [204.70, 337.28]	0.276	0.129	210.42 <sup>***</sup> [170.94, 258.16]	272.40 <sup>***</sup> [212.01, 351.09]	0.280	0.145	0.062 <sup>*</sup>

Note: C: choice model; RC: ranking recoded as a choice model; Lower and upper bounds of the confidence interval (95%) are shown in brackets; Asterisks (e.g., \*, \*\*, \*\*\*) denote significance at the 10%, 5%, and 1% level, respectively.

**Table 6. Choice and Recoded Ranking Nested Logit Models with an Alternative Specific Constant for Reforestation Alternatives**

Attribute parameters	Choice model	Recoded ranking model	
<i>BIO</i>	0.3099*** (0.0236)	0.3252*** (0.0236)	
<i>TEC</i>	0.3182*** (0.0263)	0.2576*** (0.0259)	
<i>REC</i>	0.2726*** (0.05156)	0.3200*** 0.0514	
<i>EMP</i>	0.1041*** (0.0011)	0.0119*** (0.0011)	
<i>SUR</i>	0.0159*** (0.0014)	0.0151*** (0.0013)	
<i>BID</i>	-0.0206*** (0.0017)	-0.0159*** (0.0016)	
<i>ASC</i>	35.2069 (63.7087)	20.7001 (30.9704)	
<i>IV</i> ( $\alpha_{REF}$ )	0.0893 (0.1518)	0.1411 (0.1886)	
N	3,600	3,594	
LogL ( $\beta$ )	-2,588.361	-2,636.731	
LogL (0)	-4,906.096	-4,891.540	
$\rho^2$	0.4724	0.4609	
Likelihood Ratio tests <sup>a</sup>	$H_A: \beta^C = \beta^{RC}$	$H_B: \lambda^C = \lambda^{RC}$	Reject $H_1: \beta\lambda^C = \beta\lambda^{RC}$ ?
$\chi^2$ (C vs RC)	8.806	0.894	No

Note: C: choice model; RC: recoded ranking model; Standard errors are shown in brackets; N: number of observations; IV ( $\alpha_{REF}$ ): inclusive value parameter of the REF branch; Asterisks (e.g., \*\*\*) denote significance at the 1% level.

<sup>a</sup> For the hypothesis  $H_A$ , the  $\chi^2$  statistic for 9 degrees of freedom at the 5% level is 16.919. For the hypothesis  $H_B$ , the  $\chi^2$  statistic for 1 degree of freedom at the 5% level is 3.841.

**Table 7. Choice and Recoded Ranking Nested Logit with an Alternative Specific Constant for Reforestation Alternatives and Socioeconomic Variables**

Attribute parameters	Choice model	Recoded ranking model	
<i>BIO</i>	0.2549*** (0.0387)	0.3231*** (0.0392)	
<i>TEC</i>	0.3165*** (0.0437)	0.1872*** (0.0456)	
<i>REC</i>	0.2540*** (0.0860)	0.2303*** (0.0887)	
<i>EMP</i>	0.0107*** (0.0012)	0.0123*** (0.0012)	
<i>SUR</i>	0.0155*** (0.0014)	0.0148*** (0.0014)	
<i>BID</i>	-0.0207*** (0.0017)	-0.0161*** (0.0017)	
<i>BIO*REA</i>	-0.0234 (0.0511)	-0.1218** (0.0529)	
<i>BIO*SUS</i>	0.1092** (0.0481)	0.0585 (0.0477)	
<i>TEC*REA</i>	0.1885*** (0.0593)	0.1682*** (0.0582)	
<i>TEC*SUS</i>	-0.0852 (0.0542)	0.0309 (0.0546)	
<i>REC*REA</i>	-0.4261*** (0.1143)	-0.2324** (0.1141)	
<i>REC*SUS</i>	0.2528** (0.1061)	0.2926*** (0.1078)	
<i>ASC</i>	8.5999 (5.2859)	11.0979 (7.1153)	
<i>IV (<math>\alpha_{REF}</math>)<sup>a</sup></i>	0.3469** (0.1705)	0.3598* (0.1893)	
<b>Branch parameters</b>			
<i>INC</i>	0.0013* (0.0008)	0.0007 (0.0005)	
<i>PRO</i>	2.4065* (1.3629)	0.7752 (0.7697)	
<i>AGE</i>	-0.1457** (0.0737)	-0.1628* (0.0880)	
N	3,464	3,380	
LogL ( $\beta$ )	-2,460.439	-2,440.141	
LogL (0)	-4,717,560	-4,600.418	
$\rho^2$	0.4785	0.4700	
Likelihood Ratio tests <sup>a</sup>	H <sub>A</sub> : $\beta^C = \beta^{RC}$	H <sub>B</sub> : $\lambda^C = \lambda^{RC}$	Reject H <sub>1</sub> : $\beta\lambda^C = \beta\lambda^{RC}$ ?
$\chi^2$ (C vs RC)	19.990	0.024	No

Note: C: choice model; RC: recoded ranking model; Standard errors are shown in brackets; N: number of observations; IV ( $\alpha_{REF}$ ): inclusive value parameter of the REF branch; Asterisks (e.g., \*, \*\*, \*\*\*) denote significance at the 10%, 5%, and 1% level, respectively.

<sup>a</sup> For the hypothesis H<sub>A</sub>, the  $\chi^2$  statistic for 18 degrees of freedom at the 5% level is 28.869. For the hypothesis H<sub>B</sub>, the  $\chi^2$  statistic for 1 degree of freedom at the 5% level is 3.841.

**Table 8. Choice and Recoded Ranking Nested Logit Models Estimated Using the Four First and Using the Four Last Sets of Alternatives per Respondent**

Attributes parameters	C4L	RC4L	C4F	RC4F
<i>BIO</i>	0.4192*** (0.0405)	0.4231*** (0.0367)	0.4773*** (0.0390)	0.4272*** (0.0372)
<i>TEC</i>	0.4389*** (0.0577)	0.3547*** (0.0491)	0.4499*** (0.0565)	0.2566*** (0.0517)
<i>REC</i>	0.5261*** (0.0953)	0.4266*** (0.0850)	0.3031*** (0.0997)	0.4778*** (0.0997)
<i>EMP</i>	0.0196*** (0.0020)	0.0188*** (0.0019)	0.0127*** (0.0020)	0.0151*** (0.0019)
<i>SUR</i>	0.0199*** (0.0024)	0.0178*** (0.0022)	0.0247*** (0.0025)	0.0215*** (0.0025)
<i>BID</i>	-0.0249*** (0.0037)	-0.0163*** (0.0030)	-0.0252*** (0.0041)	-0.0223*** (0.0038)
<i>IV (<math>\alpha_{REF}</math>)<sup>a</sup></i>	1.3963*** (0.1053)	1.2310*** (0.0885)	1.4557*** (0.1055)	1.4200*** (0.0989)
N	1,800	1,788	1,800	1,788
LogL ( $\beta$ )	-1,307.251	-1,309.405	-1,304.492	-1,311.968
LogL (0)	-2,453.741	-2,433.640	-2,452.355	-2,437.105
$\rho^2$	0.467	0.462	0.468	0.462

Note: C4L: choice model using the four first sets of alternatives per respondent; C4F: choice model using the four last sets of alternatives per respondent; RC4L: recoded ranking model using the four first sets of alternatives per respondent; RC4F: recoded ranking model using the four last sets of alternatives per respondent; Standard errors are shown in brackets; N: number of observations; IV ( $\alpha_{REF}$ ): inclusive value parameter of the REF branch; Asterisks (e.g., \*\*\*) denote significance at the 1% level.

<sup>a</sup> Although  $IV(\alpha_{REF}) > 1$ , the Herriges and Kling (1996) condition for local utility maximisation is fulfilled.



**Table 9. Likelihood Ratio Tests for the Equality of Parameter Vectors**

Likelihood Ratio test <sup>a</sup>	H <sub>A</sub> : $\beta^C = \beta^{RC}$	H <sub>B</sub> : $\lambda^C = \lambda^{RC}$	Reject H <sub>1</sub> : $\beta\lambda^C = \beta\lambda^{RC}$ ?
$\chi^2$ (C <sub>4L</sub> versus RC <sub>4L</sub> )	4.512	0.078	No
$\chi^2$ (C <sub>4F</sub> versus RC <sub>4F</sub> )	9.680	0.242	No
$\chi^2$ (C <sub>Q1</sub> versus RC <sub>Q1</sub> )	6.556	0.962	No
$\chi^2$ (C <sub>Q2</sub> versus RC <sub>Q2</sub> )	5.472	6.474	Yes
$\chi^2$ (C <sub>Q3</sub> versus RC <sub>Q3</sub> )	12.678	0.656	No
$\chi^2$ (C <sub>Q4</sub> versus RC <sub>Q4</sub> )	6.324	0.820	No

Note: C<sub>4L</sub>: choice model using the four first sets of alternatives per respondent; C<sub>4F</sub>: choice model using the four last sets of alternatives per respondent; RC<sub>4L</sub>: recoded ranking model using the four first sets of alternatives per respondent; RC<sub>4F</sub>: recoded ranking model using the four last sets of alternatives per respondent; C<sub>Q1</sub>: choice model including respondents that scored with 3, 4 or 5 the follow-up “I correctly understood the information provided in the previous choices/rankings”; C<sub>Q2</sub>: choice model including respondents that scored with 1, 2 or 3 the follow-up “I had difficulties in stating my answers in the previous choices/rankings”; C<sub>Q3</sub>: choice model including respondents that scored with 1, 2 or 3 the follow-up “The number of choices/rankings that I faced has been excessive”; C<sub>Q4</sub>: choice model including respondents that scored with 1, 2 or 3 the follow-up “I thought more about my answers of the first four choices/rankings than about the last four choices/rankings”; RC<sub>Q1</sub>: recoded ranking model including respondents that scored with 3, 4 or 5 the follow-up “I correctly understood the information provided in the previous choices/rankings”; RC<sub>Q2</sub>: recoded ranking model including respondents that scored with 1, 2 or 3 the follow-up “I had difficulties in stating my answers in the previous choices/rankings”; RC<sub>Q3</sub>: recoded ranking model including respondents that scored with 1, 2 or 3 the follow-up “The number of choices/rankings that I faced has been excessive”; RC<sub>Q4</sub>: recoded ranking model including respondents that scored with 1, 2 or 3 the follow-up “I thought more about my answers of the first four choices/rankings than about the last four choices/rankings”.

<sup>a</sup> For the hypothesis H<sub>A</sub>, the  $\chi^2$  statistic for 8 degrees of freedom at the 5% level is 15.507. For the hypothesis H<sub>B</sub>, the  $\chi^2$  statistic for 1 degree of freedom at the 5% level is 3.841.

**Table 10. Welfare Measures From Choice and Recoded Ranking Nested Logit Models Estimated Using the First Four Sets of Alternatives per Respondent. Parametric and Bootstrapping Measures. Tests of the Equality of Mean Values**

Attributes	Parametric				Bootstrapping				Complete combinatorial
	C4L	RC4L	Nonoverlapping	<i>t-test</i>	C4L	RC4L	Nonoverlapping	<i>t-test</i>	
	Mean	Mean	<i>p-value</i>	<i>p-value</i>	Mean	Mean	<i>p-value</i>	<i>p-value</i>	
<i>BIO</i>	16.85*** [11.58 , 22.13]	26.04*** [16.61 , 35.46]	0.221	0.095*	17.32*** [12.66 , 23.69]	27.30*** [18.91 , 41.05]	0.199	0.177	0.036**
<i>TEC</i>	17.65*** [12.39 , 22.90]	21.83*** [13.50 , 30.16]	0.545	0.405	18.08*** [13.33 , 24.73]	22.82*** [15.37 , 34.31]	0.535	0.445	0.189
<i>REC</i>	21.15*** [11.94 , 30.37]	26.25*** [13.37 , 39.12]	0.650	0.528	21.49*** [12.95 , 32.33]	27.12*** [15.64 , 44.63]	0.643	0.578	0.266
<i>EMP</i>	0.79*** [0.55 , 1.02]	1.16*** [0.74 , 1.57]	0.267	0.126	0.80*** [0.60 , 1.13]	1.21*** [0.85 , 1.82]	0.267	0.203	0.056*
<i>SUR</i>	0.80*** [0.52 , 1.07]	1.10*** [0.64 , 1.55]	0.424	0.265	0.82*** [0.57 , 1.19]	1.16*** [0.75 , 1.82]	0.424	0.330	0.130
<i>HSMIN</i>	22.92*** [14.43 , 31.41]	38.29*** [23.37 , 53.20]	0.198	0.079*	23.58*** [16.38 , 35.00]	40.15*** [27.39 , 62.36]	0.186	0.155	0.032**
<i>HSMAX</i>	217.05*** [162.19 , 271.91]	310.43*** [209.64 , 411.21]	0.206	0.111	222.68*** [175.27 , 304.28]	324.93*** [238.46 , 486.25]	0.225	0.216	0.046**

Note: C4L: choice model using the four first sets of alternatives per respondent; RC4L: recoded ranking model using the four first sets of alternatives per respondent; Lower and upper bounds of the confidence interval (95%) are shown in brackets; Asterisks (e.g., \*, \*\*, \*\*\*) denote significance at the 10%, 5%, and 1% level, respectively.

**Table 11. Welfare Measures From Choice and Recoded Ranking Nested Logit Models Estimated Using the Last Four Sets of Alternatives per Respondent. Parametric and Bootstrapping Measures. Tests of the Equality of Mean Values**

Attributes	Parametric				Bootstrapping				Complete combinatorial
	C4F	RC4F	Nonoverlapping	<i>t-test</i>	C4F	RC4F	Nonoverlapping	<i>t-test</i>	
	Mean	Mean	<i>p-value</i>	<i>p-value</i>	Mean	Mean	<i>p-value</i>	<i>p-value</i>	
<i>BIO</i>	18.90*** [13.04 , 24.76]	19.14*** [12.77 , 25.51]	0.968	0.957	19.55*** [14.41 , 27.65]	19.88*** [14.25 , 28.54]	0.969	0.952	0.477
<i>TEC</i>	17.82*** [11.78 , 23.86]	11.50*** [6.16 , 16.83]	0.276	0.124	18.42*** [12.96 , 26.65]	11.93*** [7.00 , 18.74]	0.265	0.164	0.064*
<i>REC</i>	12.00*** [3.52 , 20.49]	21.41*** [10.76 , 32.05]	0.335	0.175	12.16*** [4.14 , 21.94]	21.94*** [12.15 , 36.00]	0.342	0.228	0.088*
<i>EMP</i>	0.50*** [0.29 , 0.72]	0.67*** [0.42 , 0.93]	0.490	0.318	0.52*** [0.33 , 0.77]	0.70*** [0.48 , 1.01]	0.485	0.349	0.157
<i>SUR</i>	0.98*** [0.66 , 1.29]	0.96*** [0.63 , 1.29]	0.960	0.932	1.01*** [0.73 , 1.47]	1.00*** [0.70 , 1.48]	0.985	0.973	0.474
<i>HSMIN</i>	20.95*** [12.85 , 29.04]	30.75*** [19.86 , 41.65]	0.312	0.157	21.67*** [14.47 , 32.43]	31.93*** [22.44 , 47.38]	0.327	0.229	0.083*
<i>HSMAX</i>	204.42*** [147.25 , 261.59]	221.14*** [156.38 , 285.90]	0.790	0.704	211.16*** [162.31 , 300.02]	229.30*** [173.49 , 329.64]	0.781	0.752	0.350

Note: C4F: choice model using the four last sets of alternatives per respondent; RC4F: recoded ranking model using the four last sets of alternatives per respondent; Lower and upper bounds of the confidence interval (95%) are shown in brackets; Asterisks (e.g., \*, \*\*, \*\*\*) denote significance at the 10%, 5%, and 1% level, respectively.

**Table 12. Respondent's Scores About the Valuation Exercise from 1 (totally disagree) to 5 (totally agree)**

Follow-up statements	Choice		Ranking		$\chi^2$ -test <sup>a</sup>
	sample		sample		
	Mean	N	Mean	N	
I correctly understood the information provided in the previous choices/rankings	4.30 (0.95)	429	4.37 (0.95)	429	-0.05 <sup>b</sup>
I had difficulties in stating my answers in the previous choices/rankings	2.10 (1.23)	429	2.07 (1.26)	429	14.08
The number of choices/rankings that I faced has been excessive	2.45 (1.44)	429	2.64 (1.48)	429	12.87
I thought more about my answers of the first four choices/rankings than about the last four choices/rankings	3.02 (1.59)	429	3.04 (1.59)	429	22.76

Note: Standard errors are shown in brackets; N: number of observations.

<sup>a</sup>  $\chi^2$  with 16 degrees of freedom at the 5% level = 26.30 (the contingency table had five rows and five columns).

<sup>b</sup> In this case, the  $\chi^2$  test cannot be fulfilled since at least one cell of the contingency matrix is equal to zero. The statistic showed is a *t-test* statistic for testing the difference between mean values (*t-test* statistic at the 5% level = 1.96).

**Table 13. Choice and Recoded Ranking Nested Logit Models Estimated Using the Information of the Follow-ups**

Attribute parameters	C <sub>Q1</sub>	C <sub>Q2</sub>	C <sub>Q3</sub>	C <sub>Q4</sub>	RC <sub>Q1</sub>	RC <sub>Q2</sub>	RC <sub>Q3</sub>	RC <sub>Q4</sub>
<i>BIO</i>	0.5079*** (0.0583)	0.5370*** (0.0508)	0.5054*** (0.0473)	0.5151*** (0.0434)	0.3529*** (0.0506)	0.4070*** (0.0450)	0.4374*** (0.0404)	0.5043*** (0.0383)
<i>TEC</i>	0.5581*** (0.0879)	0.5416*** (0.0748)	0.5113*** (0.0677)	0.4561*** (0.0599)	0.4201*** (0.0714)	0.3412*** (0.0658)	0.3583*** (0.0552)	0.3905*** (0.0523)
<i>REC</i>	0.3923*** (0.1408)	0.4842*** (0.1213)	0.3017*** (0.1116)	0.3735*** (0.1008)	0.2731* (0.1474)	0.3117*** (0.1159)	0.5512*** (0.1021)	0.4538*** (0.0920)
<i>EMP</i>	0.0122*** (0.0027)	0.0161*** (0.0025)	0.0152*** (0.0022)	0.0166*** (0.0020)	0.0147*** (0.0026)	0.0166*** (0.0023)	0.0196*** (0.0020)	0.0187*** (0.0019)
<i>SUR</i>	0.0182*** (0.0033)	0.0257*** (0.0031)	0.0213*** (0.0028)	0.0240*** (0.0026)	0.0195*** (0.0032)	0.0209*** (0.0029)	0.0211*** (0.0025)	0.0218*** (0.0024)
<i>BID</i>	-0.0251*** (0.0056)	-0.0320*** (0.0052)	-0.0314*** (0.0048)	-0.0298*** (0.0042)	-0.0119*** (0.0041)	-0.0182*** (0.0041)	-0.0246*** (0.0038)	-0.0199*** (0.0033)
<i>IV</i> ( $\alpha_{REF}$ ) <sup>a</sup>	1.2517*** (0.1418)	1.4736*** (0.1288)	1.5444*** (0.1283)	1.6833*** (0.1200)	1.1478*** (0.1099)	1.3967*** (0.1187)	1.4426*** (0.1037)	1.4751*** (0.0096)
N	776	1,287	1,584	2,191	732	1,230	1,750	2,190
LogL ( $\beta$ )	-536.933	-882.242	-1,157.302	-1,560.313	-558.768	-916.852	-1,244.624	-1,520.676
LogL (0)	-1,052.197	-1,760.594	-2,157.074	-2,998.555	-988.428	-1,673.950	-2,391.358	-3,000.634
$\rho^2$	0.490	0.499	0.463	0.480	0.435	0.452	0.480	0.493

Note: C<sub>Q1</sub>: choice model including respondents that scored with 3, 4 or 5 the follow-up “I correctly understood the information provided in the previous choices/rankings”; C<sub>Q2</sub>: choice model including respondents that scored with 1, 2 or 3 the follow-up “I had difficulties in stating my answers in the previous choices/rankings”; C<sub>Q3</sub>: choice model including respondents that scored with 1, 2 or 3 the follow-up “The number of choices/rankings that I faced has been excessive”; C<sub>Q4</sub>: choice model including respondents that scored with 1, 2 or 3 the follow-up “I thought more about my answers of the first four choices/rankings than about the last four choices/rankings”; RC<sub>Q1</sub>: recoded ranking model including respondents that scored with 3, 4 or 5 the follow-up “I correctly understood the information provided in the previous choices/rankings”; RC<sub>Q2</sub>: recoded ranking model including respondents that scored with 1, 2 or 3 the follow-up “I had difficulties in stating my answers in the previous choices/rankings”; RC<sub>Q3</sub>: recoded ranking model including respondents that scored with 1, 2 or 3 the follow-up “The number of choices/rankings that I faced has been excessive”; RC<sub>Q4</sub>: recoded ranking model including respondents that scored with 1, 2 or 3 the follow-up “I thought more about my answers of the first four choices/rankings than about the last four choices/rankings”; Standard errors are shown in brackets; N: number of observations; IV ( $\alpha_{REF}$ ): inclusive value parameter of the REF branch; N: number of observations; Asterisks (e.g., \*, \*\*, \*\*\*) denote significance at the 10%, 5%, and 1% level, respectively.

<sup>a</sup> Although  $IV(\alpha_{REF}) > 1$ , the Hurriges and Kling (1996) condition for local utility maximisation is fulfilled.

**Table 14. Welfare Measures From Choice and Recoded Ranking Nested Logit Models Estimated Using the Follow-up “I correctly understood the information provided in the previous choices/rankings”. Parametric and Bootstrapping Measures. Tests of the Equality of Mean Values**

Attributes	Parametric				Bootstrapping				Complete combinatorial
	CQ1	RCQ1	Nonoverlapping	<i>t-test</i>	CQ1	RCQ1	Nonoverlapping	<i>t-test</i>	
	Mean	Mean	<i>p-value</i>	<i>p-value</i>	Mean	Mean	<i>p-value</i>	<i>p-value</i>	
<i>BIO</i>	20.24*** [11.88 , 28.59]	29.60*** [10.01 , 49.19]	0.513	0.389	21.78*** [14.05 ,36.77]	32.52 [16.80 , 82.97]	0.475	0.890	0.170
<i>TEC</i>	22.24*** [12.95 , 31.52]	35.24*** [10.63 , 59.85]	0.450	0.333	23.80*** [15.25 , 39.10]	38.32 [19.47 , 103.71]	0.405	0.889	0.130
<i>REC</i>	15.63*** [3.62 , 27.64]	22.91* [-2.78 , 48.60]	0.707	0.615	16.40 [4.48 , 33.30]	25.34 [-4.59 , 70.28]	0.719	0.891	0.329
<i>EMP</i>	0.49*** [0.20 , 0.77]	1.24*** [0.33 , 2.14]	0.211	0.119	0.52** [0.27 , 0.92]	1.28 [0.66 , 3.72]	0.168	0.877	0.028**
<i>SUR</i>	0.73*** [0.35 , 1.10]	1.63*** [0.46 , 2.80]	0.254	0.153	0.79*** [0.43 , 1.40]	1.78 [0.87 , 5.30]	0.198	0.860	0.046**
<i>HSMIN</i>	14.97*** [4.82 , 25.11]	35.42*** [8.38 , 62.46]	0.282	0.165	16.27* [6.66 , 32.47]	37.56 [16.64 , 113.98]	0.247	0.869	0.058*
<i>HSMAX</i>	201.19*** [125.97 , 276.41]	373.44*** [139.96 , 606.92]	0.273	0.169	216.27*** [149.97 , 357.12]	402.66 [229.66 , 1,106.1]	0.221	0.869	0.051*

Note: CQ1: choice model including respondents that scored with 3, 4 or 5 the follow-up “I correctly understood the information provided in the previous choices/rankings”; RCQ1: recoded ranking model including respondents that scored with 3, 4 or 5 the follow-up “I correctly understood the information provided in the previous choices/rankings”; Lower and upper bounds of the confidence interval (95%) are shown in brackets; Asterisks (e.g., \*, \*\*, \*\*\*) denote significance at the 10%, 5%, and 1% level, respectively.

**Table 15. Welfare Measures From Choice and Recoded Ranking Nested Logit Models Estimated Using the Follow-up “I had difficulties in stating my answers in the previous choices/rankings”. Parametric and Bootstrapping Measures. Tests of the Equality of Mean Values**

Attributes	Parametric				Bootstrapping				Complete combinatorial
	CQ2	RCQ2	Nonoverlapping	<i>t-test</i>	CQ2	RCQ2	Nonoverlapping	<i>t-test</i>	
	Mean	Mean	<i>p-value</i>	<i>p-value</i>	Mean	Mean	<i>p-value</i>	<i>p-value</i>	
<i>BIO</i>	16.79*** [11.68 , 21.91]	22.31*** [12.53 , 32.10]	0.468	0.327	17.32*** [12.79 , 24.40]	24.50 [15.28 , 39.79]	0.447	0.754	0.144
<i>TEC</i>	16.94*** [11.51 , 22.37]	18.71*** [9.32 , 28.10]	0.814	0.749	17.44*** [12.53 , 24.45]	20.34 [11.64 , 34.41]	0.792	0.845	0.367
<i>REC</i>	15.14*** [6.78 , 23.50]	17.09*** [3.17 , 31.00]	0.862	0.814	15.37*** [7.54 , 25.23]	18.45 [4.54 , 37.23]	0.870	0.898	0.416
<i>EMP</i>	0.50*** [0.29 , 0.72]	0.91*** [0.48 , 1.35]	0.219	0.096*	0.52*** [0.33 , 0.77]	1.00 [0.60 , 1.66]	0.194	0.562	0.031**
<i>SUR</i>	0.80*** [0.53 , 1.07]	1.15*** [0.63 , 1.67]	0.395	0.250	0.83*** [0.59 , 1.20]	1.26 [0.76 , 2.11]	0.405	0.666	0.111
<i>HSMIN</i>	17.98*** [10.34 , 25.62]	33.31*** [17.31 , 49.31]	0.204	0.090*	18.60*** [12.04 , 29.14]	36.63 [22.14 , 62.43]	0.173	0.606	0.030**
<i>HSMAX</i>	187.78*** [137.21 , 238.34]	266.79*** [162.46 , 371.13]	0.317	0.182	193.56 [150.85 , 270.18]	291.84 [195.73 , 476.90]	0.305	0.696	0.070*

Note: CQ2: choice model including respondents that scored with 1, 2 or 3 the follow-up “I had difficulties in stating my answers in the previous choices/rankings”; RCQ2: recoded ranking model including respondents that scored with 1, 2 or 3 the follow-up “I had difficulties in stating my answers in the previous choices/rankings”; Lower and upper bounds of the confidence interval (95%) are shown in brackets; Asterisks (e.g., \*, \*\*, \*\*\*) denote significance at the 10%, 5%, and 1% level, respectively.

**Table 16. Welfare Measures From Choice and Recoded Ranking Nested Logit Models Estimated Using the Follow-up “The number of choices/rankings that I faced has been excessive”. Parametric and Bootstrapping Measures. Tests of the Equality of Mean Values**

Attributes	Parametric				Bootstrapping				Complete combinatorial
	CQ3	RCQ3	Nonoverlapping	<i>t-test</i>	CQ3	RCQ3	Nonoverlapping	<i>t-test</i>	
	Mean	Mean	<i>p-value</i>	<i>p-value</i>	Mean	Mean	<i>p-value</i>	<i>p-value</i>	
<i>BIO</i>	16.12*** [11.42 , 20.82]	17.79*** [12.23 , 23.35]	0.750	0.653	16.56*** [12.31 , 22.92]	18.36*** [13.38 , 25.46]	0.748	0.681	0.325
<i>TEC</i>	16.31*** [11.39 , 21.23]	14.57*** [9.27 , 19.88]	0.737	0.638	16.73*** [12.29 , 22.97]	15.03*** [10.32 , 22.01]	0.748	0.679	0.322
<i>REC</i>	9.62*** [2.11 , 17.13]	22.42*** [12.84 , 31.99]	0.142	0.039**	9.67*** [2.61 , 17.96]	22.82*** [14.05 , 35.03]	0.139	0.060*	0.020**
<i>EMP</i>	0.48*** [0.29 , 0.67]	0.80*** [0.53 , 1.06]	0.171	0.051*	0.50*** [0.33 , 0.72]	0.82*** [0.59 , 1.14]	0.190	0.085*	0.028**
<i>SUR</i>	0.68*** [0.45 , 0.91]	0.86*** [0.56 , 1.15]	0.519	0.349	0.70*** [0.49 , 1.02]	0.89*** [0.62 , 1.29]	0.515	0.405	0.182
<i>HSMIN</i>	16.27*** [9.49 , 23.05]	27.69*** [18.28 , 37.10]	0.167	0.054*	16.77*** [10.83 , 26.02]	28.56*** [20.23 , 40.86]	0.167	0.089*	0.030**
<i>HSMAX</i>	169.84*** [126.83 , 212.85]	223.17*** [164.55 , 281.79]	0.305	0.151	174.38*** [138.12 , 239.30]	229.94*** [179.28 , 317.08]	0.307	0.230	0.080*

Note: CQ3: choice model including respondents that scored with 1, 2 or 3 the follow-up “The number of choices/rankings that I faced has been excessive”; RCQ3: recoded ranking model including respondents that scored with 1, 2 or 3 the follow-up “The number of choices/rankings that I faced has been excessive”; Lower and upper bounds of the confidence interval (95%) are shown in brackets; Asterisks (e.g., \*, \*\*, \*\*\*) denote significance at the 10%, 5%, and 1% level, respectively.



**Table 17. Welfare Measures From Choice and Recoded Ranking Nested Logit Models Estimated Using the Follow-up “I thought more about my answers of the first four choices/rankings than about the last four choices/rankings”. Parametric and Bootstrapping Measures. Tests of the Equality of Mean Values**

Attributes	Parametric				Bootstrapping				Complete combinatorial
	CQ4	RCQ4	Nonoverlapping	<i>t-test</i>	CQ4	RCQ4	Nonoverlapping	<i>t-test</i>	
	Mean	Mean	<i>p-value</i>	<i>p-value</i>	Mean	Mean	<i>p-value</i>	<i>p-value</i>	
<i>BIO</i>	17.26*** [12.51, 22.01]	25.38*** [17.08, 33.68]	0.223	0.096*	17.67*** [13.36, 23.37]	26.39*** [19.11, 37.38]	0.205	0.151	0.039**
<i>TEC</i>	15.28*** [10.73, 19.84]	19.65*** [12.55, 26.75]	0.462	0.309	15.62*** [11.55, 21.38]	20.40*** [14.07, 30.27]	0.434	0.335	0.193
<i>REC</i>	12.51*** [5.17, 19.85]	22.83*** [11.88, 33.79]	0.269	0.125	12.60*** [5.66, 20.76]	23.38*** [13.31, 37.68]	0.273	0.169	0.058*
<i>EMP</i>	0.56*** [0.37, 0.75]	0.94*** [0.62, 1.27]	0.165	0.054*	0.57*** [0.40, 0.79]	0.98*** [0.70, 1.41]	0.135	0.073**	0.016*
<i>SUR</i>	0.80*** [0.56, 1.04]	1.10*** [0.71, 1.48]	0.352	0.198	0.82*** [0.60, 1.14]	1.14*** [0.79, 1.69]	0.383	0.272	0.100*
<i>HSMIN</i>	21.13*** [13.88, 28.38]	35.54*** [23.05, 48.02]	0.153	0.050**	21.67*** [15.40, 31.37]	36.91*** [26.03, 54.98]	0.141	0.094*	0.021**
<i>HSMAX</i>	189.50*** [144.25, 234.75]	285.17*** [201.62, 368.72]	0.145	0.049**	193.91*** [155.62, 258.15]	295.80*** [223.34, 428.31]	0.135	0.105	0.021**

Note: CQ4: choice model including respondents that scored with 1, 2 or 3 the follow-up “I thought more about my answers of the first four choices/rankings than about the last four choices/rankings”; RCQ4: recoded ranking model including respondents that scored with 1, 2 or 3 the follow-up “I thought more about my answers of the first four choices/rankings than about the last four choices/rankings”; Lower and upper bounds of the confidence interval (95%) are shown in brackets; Asterisks (e.g., \*, \*\*, \*\*\*) denote significance at the 10%, 5%, and 1% level, respectively.