Model Uncertainty

Robin Musolff Florian Zimmermann

Online Appendix

B Additional Results for the Restricted Samples

B.1 Baseline Experiment: Additional Results in Restricted Sample

Here, we present additional results for the restricted sample of the Baseline Experiment, featuring 230 participants who solved both of the example screens.

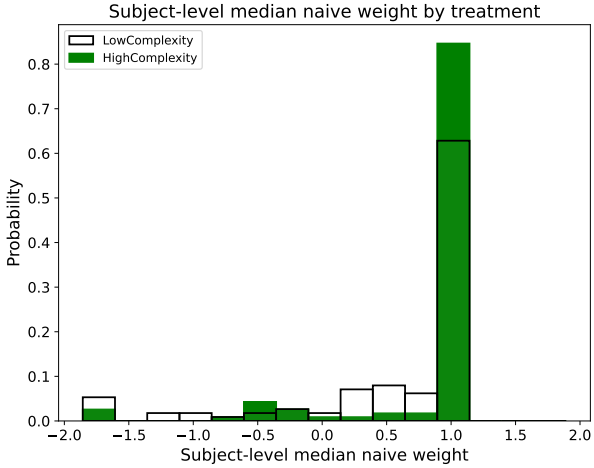


Figure B.1: Distribution of median naive weights, computed for each subject. *The figure plots the distribution of naive weights λ calculated as specified in Equation (2), using the restricted sample of the Baseline Experiment with 230 participants. Only the median naive weight for each participant is plotted.*

B.2 Equally Likely Models: Additional Results in Restricted Sample

Here, we present additional results for the restricted sample of the Equally Likely Models Experiment, featuring 348 participants who solved both of the example screens.

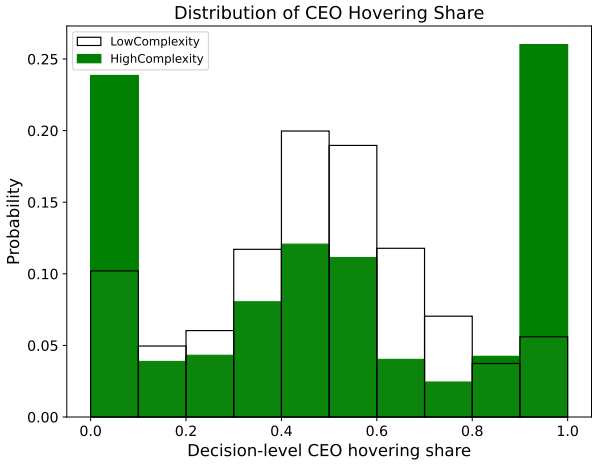


Figure B.2: Distribution of decision-level CEO hovering share in the Equally Likely Models Experiment. *The figure plots the distribution of the share of time that respondents spent looking at the values of the "The CEO is key" model, using the restricted sample of the Equally Likely Models study with 348 participants. Hovering shares are plotted separately for each of the eight guesses made by respondents*

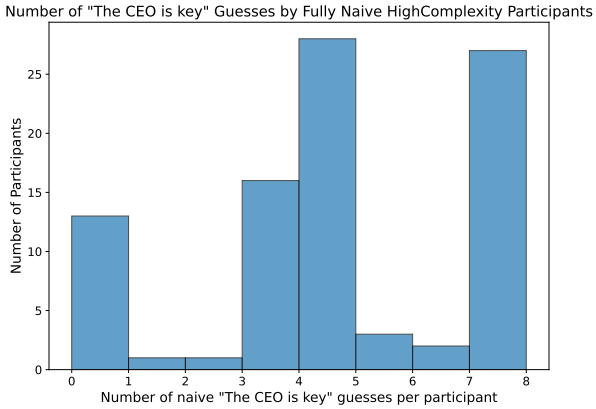


Figure B.3: Distribution of naive decision-making in the Equally Likely Models Experiment. *The figure plots the distribution of the number of times participants selected the value corresponding to the "The CEO is key" model, using the restricted sample of the High-Complexity treatment of the Equally Likely Models study, limited to the 91 participants in the HighComplexity condition who made only fully naive guesses, i.e. who always selected a value corresponding to either the "The CEO is key" or "Products are crucial" model.*

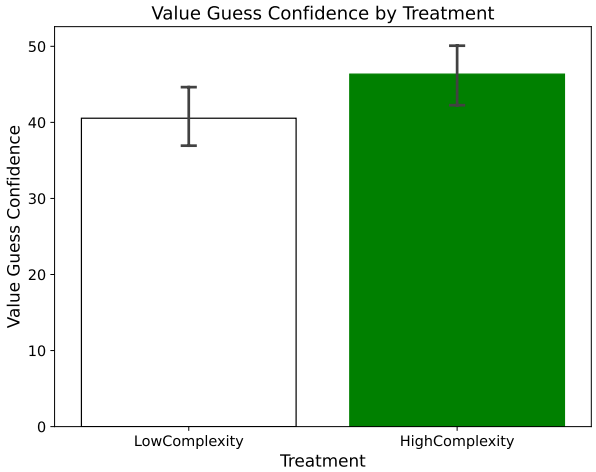
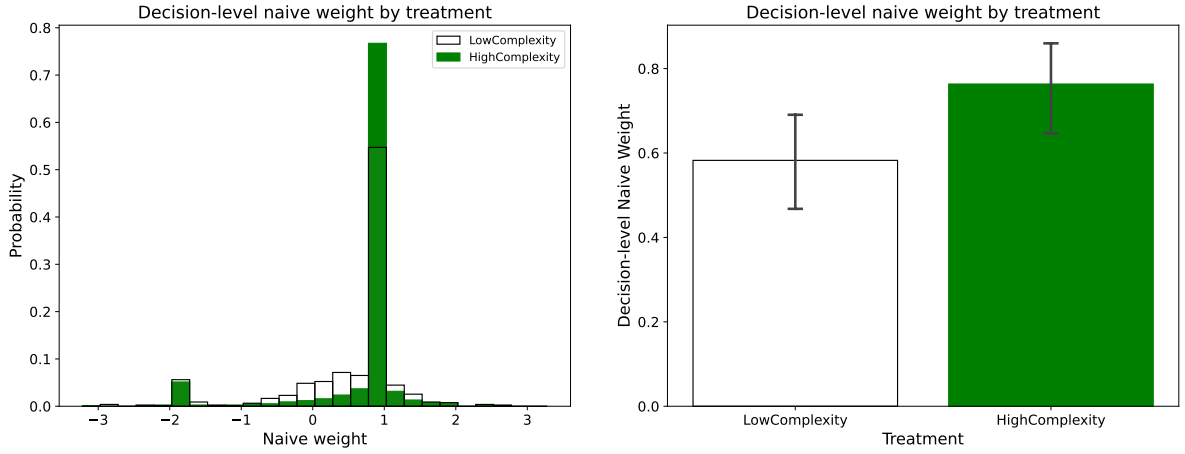


Figure B.4: Average value guess confidence in the Equally Likely Models Experiment. *The figure plots the average confidence that respondents had in their company value guesses, using the restricted sample of the Equally Likely Models study with 348 participants.*

B.3 Investment Experiment 1: Results in Restricted Sample

Here, we present the results for the restricted sample of the Investment Experiment 1, featuring 193 participants who solved both of the example screens.



(a) Distribution of decision-level naive weights

(b) Mean decision-level naive weights

Figure B.5: Decision-level naive weights in the restricted sample of the Investment Experiment 1. *Panel (a) plots the distribution of naive weights λ calculated as specified in Equation 2, using the restricted sample of the Investment Experiment 1 with 193 participants. Panel (b) plots average naive weights.*

Table B.1: Company Bids in Restricted Sample of Investment Experiment 1

Dependent variable:	Company Bids		
Sample:	LowComplexity (1)	HighComplexity (2)	Pooled (3)
Rational Benchmark	0.478*** (0.065)	0.311*** (0.065)	0.478*** (0.064)
Naive Benchmark	0.558*** (0.053)	0.725*** (0.055)	0.558*** (0.052)
Rational B. × HighComplexity			-0.167* (0.092)
Naive B. × HighComplexity			0.167** (0.076)
R^2	0.906	0.920	0.913
Observations	784	760	1544

The table presents OLS regressions of respondents' company bids on the rational and naive benchmarks as detailed in Section 3.1. The table is based on the restricted sample of the Investment Experiment 1. Column (1) uses observations from the LowComplexity treatment, column (2) from the HighComplexity treatment, and column (3) from both. Stars highlight significant differences from 0 with * for $p < 0.10$, ** for $p < 0.05$, *** for $p < 0.01$. Standard errors are clustered on the subject level.

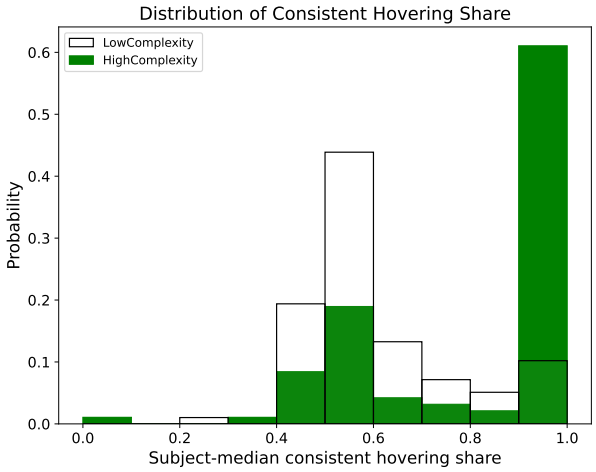
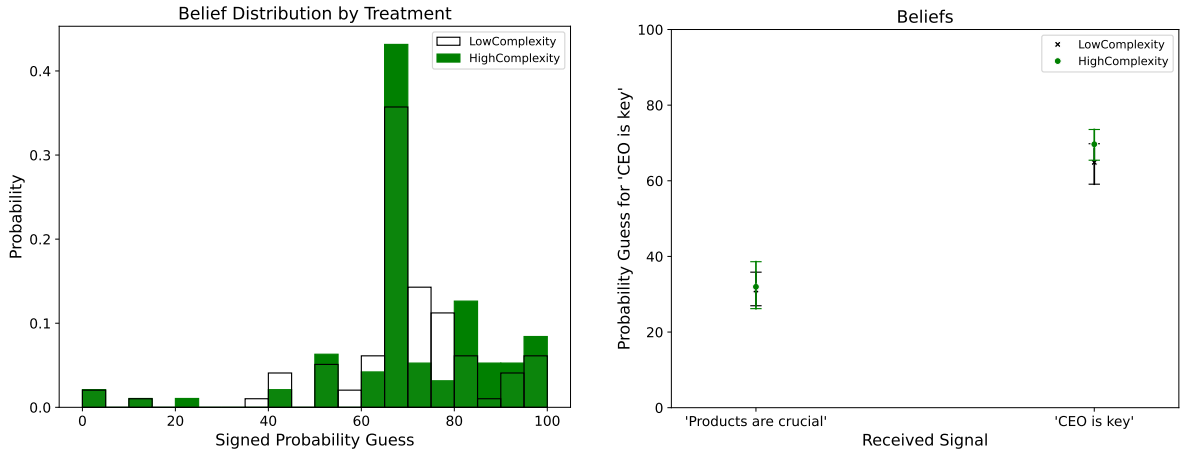


Figure B.6: Distribution of subject-medians of the consistent hovering shares in the restricted sample of the Investment Experiment 1. *The figure plots the distribution of the share of time that respondents spent looking at the values of the signal-consistent model, using the restricted sample of the Investment Experiment 1 with 193 participants. Only the median consistent share for each participant is plotted.*

Table B.2: Beliefs and Recall in Restricted Sample of the Investment Experiment 1

Dependent variable:	Probability Guess	Correct Recall
Sample:	Pooled (1)	Pooled (2)
Constant	66.844^{***}	0.959^{***}
	(1.758)	(0.020)
HighComplexity	2.044	0.030
	(2.598)	(0.023)
R^2	0.003	0.009
Observations	193	193

The table presents OLS regressions using the restricted sample of the Investment Experiment 1. In column (1), the dependent variable is the probability guess for the likely state. Column (2) uses a dummy for whether respondents correctly recall the more likely model. All columns use observations from both the High-Complexity and LowComplexity conditions. Stars highlight significant differences from 0 with * for $p < 0.10$, ** for $p < 0.05$, *** for $p < 0.01$. Standard errors are clustered on the subject level.



(a) Histogram of signed probability guesses.

(b) Mean probability guesses for "The CEO is key".

Figure B.7: Beliefs in the restricted sample of the Investment Experiment 1. *In Panel (a) beliefs are converted into the direction of the more likely model, so that 65 corresponds to the Bayesian probability. Panel (b) plots mean probability guesses for the model "The CEO is key". The figure is based on the restricted sample of the Investment Experiment 1 with 193 participants.*

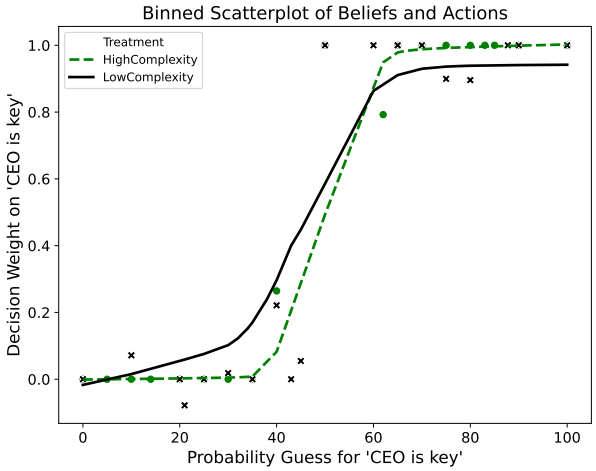
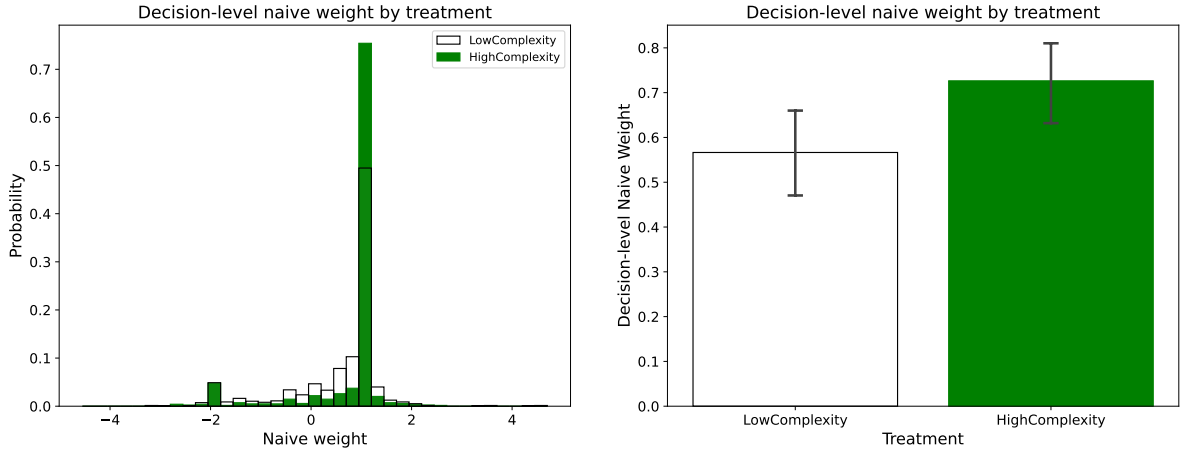


Figure B.8: The relationship between decisions and beliefs in the restricted sample of the Investment Experiment 1. *The figure shows a binned scatterplot using the restricted sample of the Investment Experiment 1 with 193 participants. It has the probability guess that "The CEO is key" is the more likely model on the horizontal axis, and the decision weight γ as defined in Equation 3 on the vertical axis. The lines show LOWESS regressions based on all datapoints.*

B.4 Investment Experiment 2: Results in Restricted Sample

Here, we present the results for the restricted sample of the Investment Experiment 2, featuring 323 participants who solved both of the example screens.



(a) Distribution of decision-level naive weights

(b) Mean decision-level naive weights

Figure B.9: Decision-level naive weights in the restricted sample of the Investment Experiment 2. *Panel (a) plots the distribution of naive weights λ calculated as specified in Equation 2, using the restricted sample of the Investment Experiment 2 with 323 participants. Panel (b) plots average naive weights.*

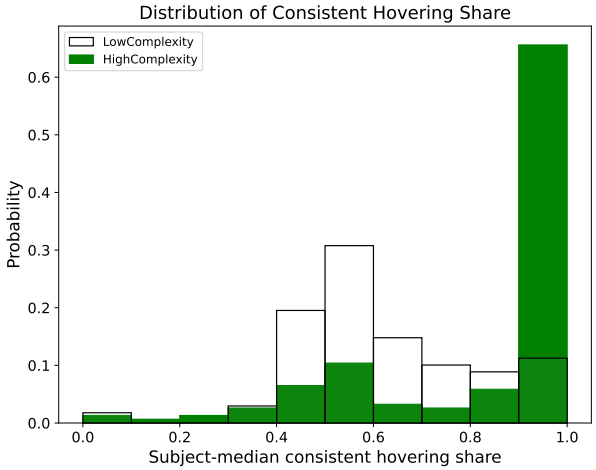


Figure B.10: Distribution of subject-medians of the consistent hovering shares in the restricted sample of the Investment Experiment 2. *The figure plots the distribution of the share of time that respondents spent looking at the values of the signal-consistent model, using the restricted sample of the Investment Experiment 2 with 323 participants. Only the median consistent share for each participant is plotted.*

Table B.3: Company Bids in Restricted Sample of Investment Experiment 2

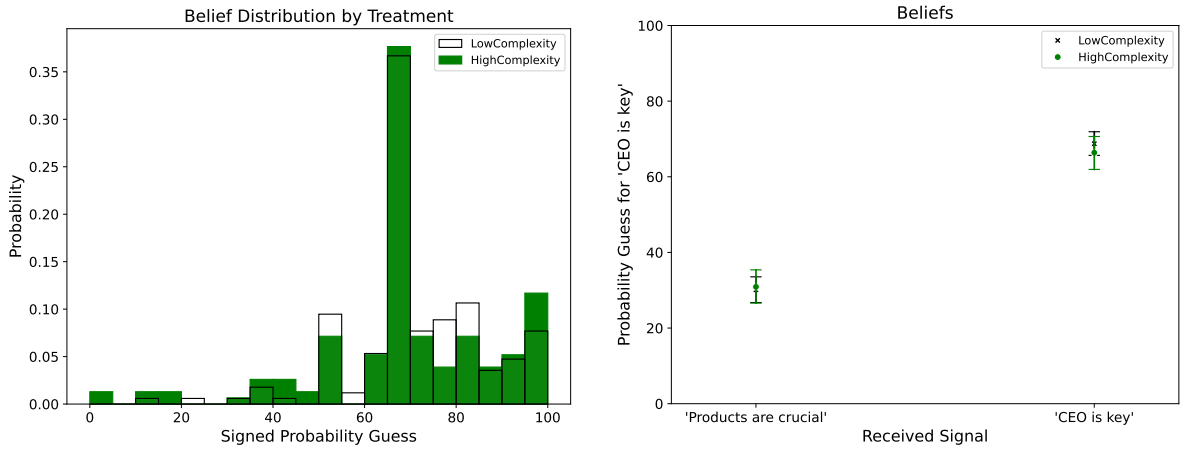
Dependent variable:	Company Bids		
Sample:	LowComplexity (1)	HighComplexity (2)	Pooled (3)
Rational Benchmark	0.508***	0.281***	0.508***
	(0.052)	(0.050)	(0.052)
Naive Benchmark	0.534***	0.721***	0.534***
	(0.043)	(0.045)	(0.043)
Rational B. × HighComplexity			-0.227***
			(0.072)
Naive B. × HighComplexity			0.187***
			(0.062)
R^2	0.892	0.908	0.900
Observations	1352	1232	2584

The table presents OLS regressions of respondents' company bids on the rational and naive benchmarks as detailed in Section 3.1. The table is based on the restricted sample of the Investment Experiment 2. Column (1) uses observations from the LowComplexity treatment, column (2) from the HighComplexity treatment, and column (3) from both. Stars highlight significant differences from 0 with * for $p < 0.10$, ** for $p < 0.05$, *** for $p < 0.01$. Standard errors are clustered on the subject level.

Table B.4: Beliefs and Recall in Restricted Sample of the Investment Experiment 2

Dependent variable:	Probability Guess	Correct Recall
Sample:	Pooled (1)	Pooled (2)
Constant	69.302***	0.982***
	(1.176)	(0.010)
HighComplexity	-1.563	-0.021
	(1.999)	(0.019)
R^2	0.002	0.004
Observations	323	323

The table presents OLS regressions using the restricted sample of the Investment Experiment 2. In column (1), the dependent variable is the probability guess for the likely state. Column (2) uses a dummy for whether respondents correctly recall the more likely model. All columns use observations from both the High-Complexity and LowComplexity conditions. Stars highlight significant differences from 0 with * for $p < 0.10$, ** for $p < 0.05$, *** for $p < 0.01$. Standard errors are clustered on the subject level.



(a) Histogram of signed probability guesses.

(b) Mean probability guesses for "The CEO is key".

Figure B.11: Beliefs in the restricted sample of the Investment Experiment 2. *In Panel (a) beliefs are converted into the direction of the more likely model, so that 65 corresponds to the Bayesian probability. Panel (b) plots mean probability guesses for the model "The CEO is key". The figure is based on the restricted sample of the Investment Experiment 2 with 323 participants.*

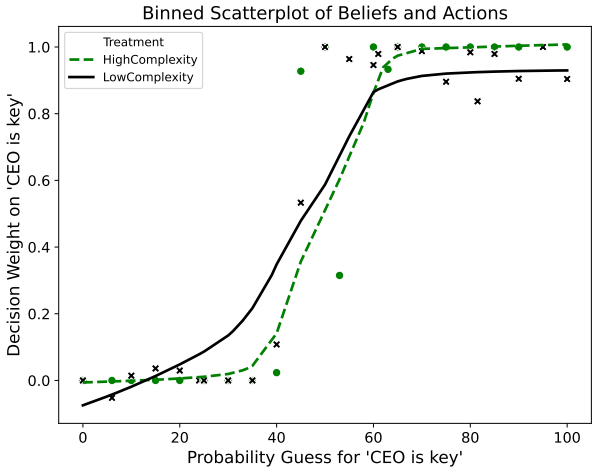


Figure B.12: The relationship between decisions and beliefs in the restricted sample of the Investment Experiment 2. *The figure shows a binned scatterplot using the restricted sample of the Investment Experiment 2 with 323 participants. It has the probability guess that "The CEO is key" is the more likely model on the horizontal axis, and the decision weight γ as defined in Equation 3 on the vertical axis. The lines show LOWESS regressions based on all datapoints.*

B.5 Delayed Belief Elicitation: Results in Restricted Sample

Here, we present the results for the restricted sample of the Delayed Belief Elicitation Experiment, featuring 342 participants who solved both of the example screens.

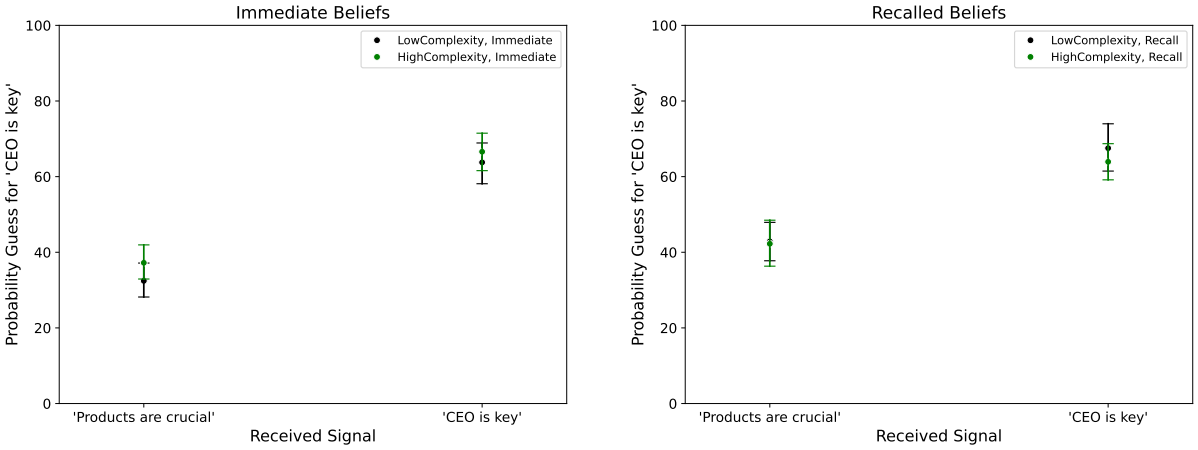


Figure B.13: Immediate and recalled beliefs in the Delayed Belief Elicitation Experiment. *The left panel plots the mean probability guess for the "The CEO is key" model in the Immediate condition by received signal separately for the LowComplexity and HighComplexity condition. The right panel does the same for the Recall condition, where beliefs were elicited with a one day delay. This figure is based on the restricted sample of the Delayed Belief Elicitation Experiment with 342 participants.*

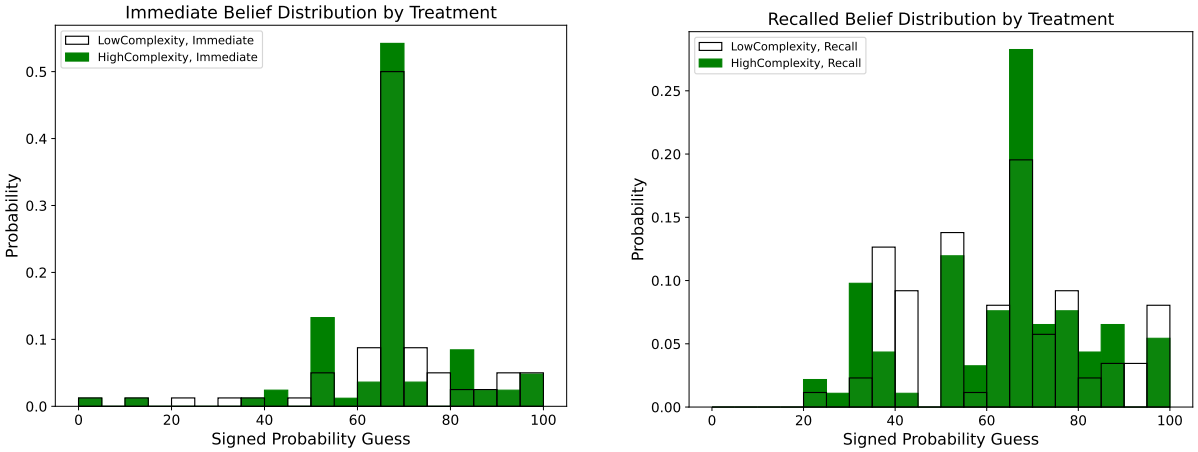


Figure B.14: Distribution of immediate and recalled beliefs in the restricted sample of the Delayed Belief Elicitation Experiment. *The left panel plots the distribution of immediate beliefs and the right panel of recalled beliefs. Beliefs are converted into the direction of the more likely model, so that 65 corresponds to the Bayesian probability. This figure is based on the restricted sample of the Delayed Belief Elicitation Experiment with 342 participants.*

Table B.5: Beliefs and Recall in the Restricted Sample of the Delayed Belief Eliciation Experiment

Dependent variable:	Probability Guess		Correct Recall	
Sample:	Immediate	Recall	Immediate	Recall
	(1)	(2)	(3)	(4)
Constant	65.713***	61.195***	0.950***	0.736***
	(1.865)	(2.106)	(0.025)	(0.048)
HighComplexity	-1.008	0.044	0.026	0.014
	(2.547)	(2.843)	(0.030)	(0.066)
R^2	0.001	0.000	0.005	0.000
Observations	163	179	163	179

The table presents OLS regressions using the restricted sample of the Delayed Belief Elicitation Experiment. In columns (1) and (2), we regress respondents' probability guesses on a constant and a treatment dummy for the HighComplexity condition. Probability guesses are converted in the direction of the more likely model, so that a guess of 65 corresponds to the Bayesian probability. In columns (3) and (4), the dependent variable is a dummy for whether respondents correctly recall the more likely model. Columns (1) and (3) use observations from the Immediate condition, while columns (2) and (4) use observations from the Recall condition. Stars highlight significant differences from 0 with * for $p < 0.10$, ** for $p < 0.05$, *** for $p < 0.01$. Standard errors are clustered on the subject level.

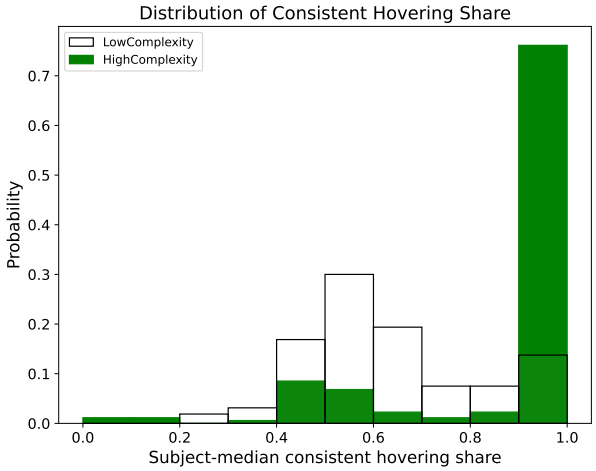
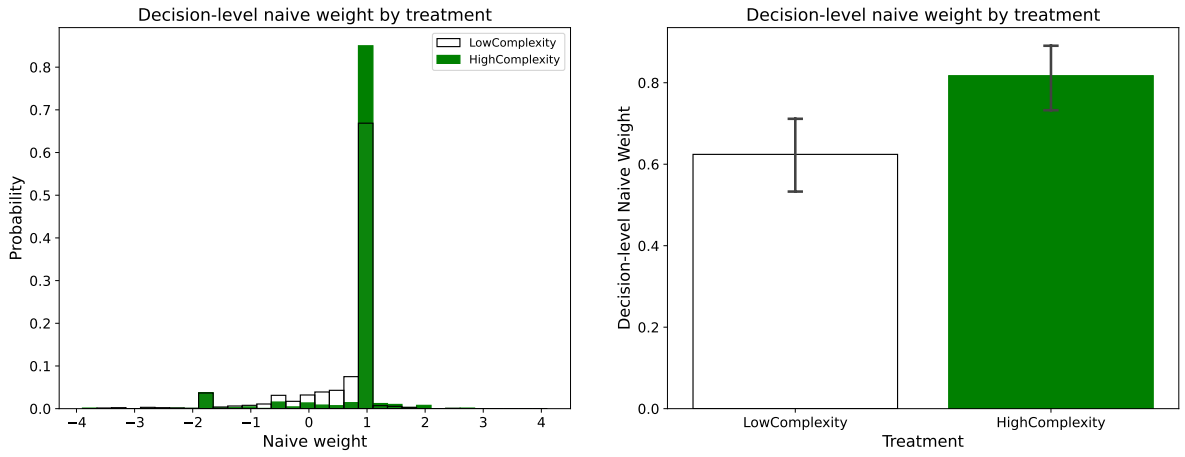


Figure B.16: Distribution of subject-medians of the consistent hovering shares in the restricted sample of the Baseline Confidence Experiment. *The figure plots the distribution of the share of time that respondents spent looking at the values of the signal-consistent model, using the restricted sample of the Baseline Confidence Experiment with 336 participants. Only the median consistent share for each participant is plotted.*

B.6 Baseline Confidence: Additional Results in Restricted Sample

Here, we present the results for the restricted sample of the Baseline Confidence Experiment, featuring 336 participants who solved both of the example screens.



(a) Distribution of decision-level naive weights

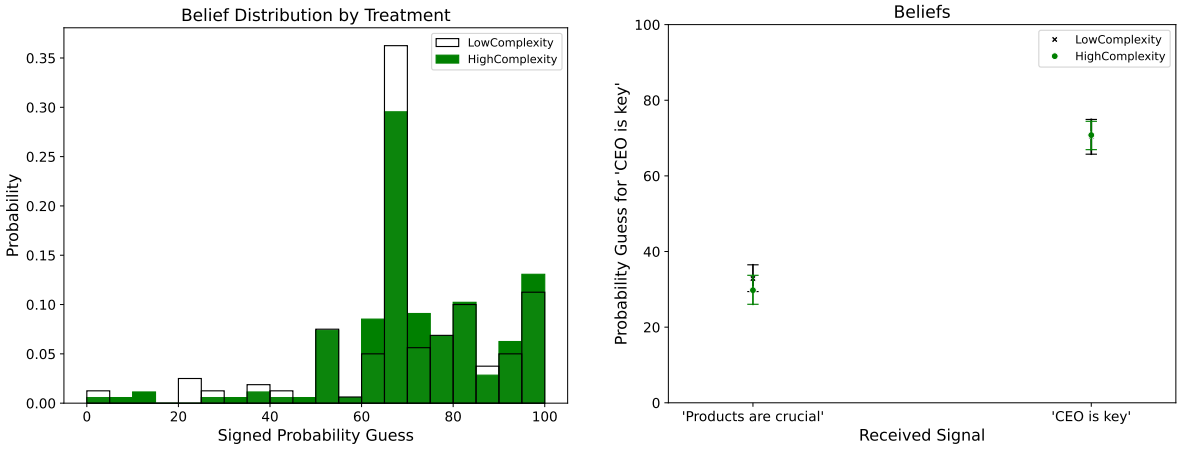
(b) Mean decision-level naive weights

Figure B.15: Decision-level naive weights in the restricted sample of the Baseline Confidence Experiment. *Panel (a) plots the distribution of naive weights λ calculated as specified in Equation 2, using the restricted sample of the Baseline Confidence Experiment with 336 participants. Panel (b) plots average naive weights.*

Table B.6: Company Value Guesses in the Restricted Sample of the Baseline Confidence Experiment

Dependent variable:	Company Value Guess		
Sample:	LowComplexity (1)	HighComplexity (2)	Pooled (3)
Rational Benchmark	0.428*** (0.052)	0.226*** (0.042)	0.428*** (0.052)
Naive Benchmark	0.613*** (0.044)	0.797*** (0.039)	0.613*** (0.044)
Rational B. × HighComplexity			-0.202*** (0.067)
Naive B. × HighComplexity			0.184*** (0.059)
R^2	0.920	0.936	0.928
Observations	1280	1408	2688

The table presents OLS regressions of respondents' company value guesses on the rational and naive benchmarks as detailed in Section 3.1. The table is based on the restricted sample of the Baseline Confidence Experiment. Column (1) uses observations from the LowComplexity treatment, column (2) from the HighComplexity treatment, and column (3) from both. Stars highlight significant differences from 0 with * for $p < 0.10$, ** for $p < 0.05$, *** for $p < 0.01$. Standard errors are clustered on the subject level.



(a) Histogram of signed probability guesses.

(b) Mean probability guesses for "The CEO is key".

Figure B.17: Beliefs in the restricted sample of the Baseline Confidence Experiment. *In Panel (a) beliefs are converted into the direction of the more likely model, so that 65 corresponds to the Bayesian probability. Panel (b) plots mean probability guesses for the model "The CEO is key". The figure is based on the restricted sample of the Baseline Confidence Experiment with 336 participants.*

Table B.7: Beliefs and Recall in the Restricted Sample of the Baseline Confidence Experiment

Dependent variable:	Probability Guess	Correct Recall
Sample:	Pooled	Pooled
	(1)	(2)
Constant	68.806***	0.944***
	(1.518)	(0.018)
HighComplexity	1.716	0.022
	(2.056)	(0.023)
R^2	0.002	0.003
Observations	336	336

The table presents OLS regressions using the restricted sample of the Baseline Confidence Experiment. In column (1), the dependent variable is the probability guess for the likely state. Column (2) uses a dummy for whether respondents correctly recall the more likely model. All columns use observations from both the HighComplexity and LowComplexity conditions. Stars highlight significant differences from 0 with * for $p < 0.10$, ** for $p < 0.05$, *** for $p < 0.01$. Standard errors are clustered on the subject level.

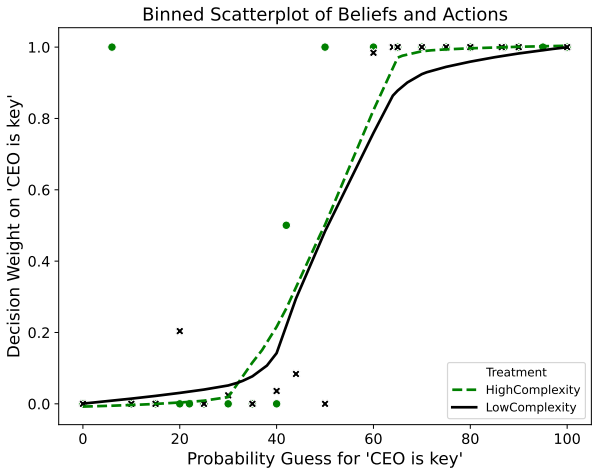
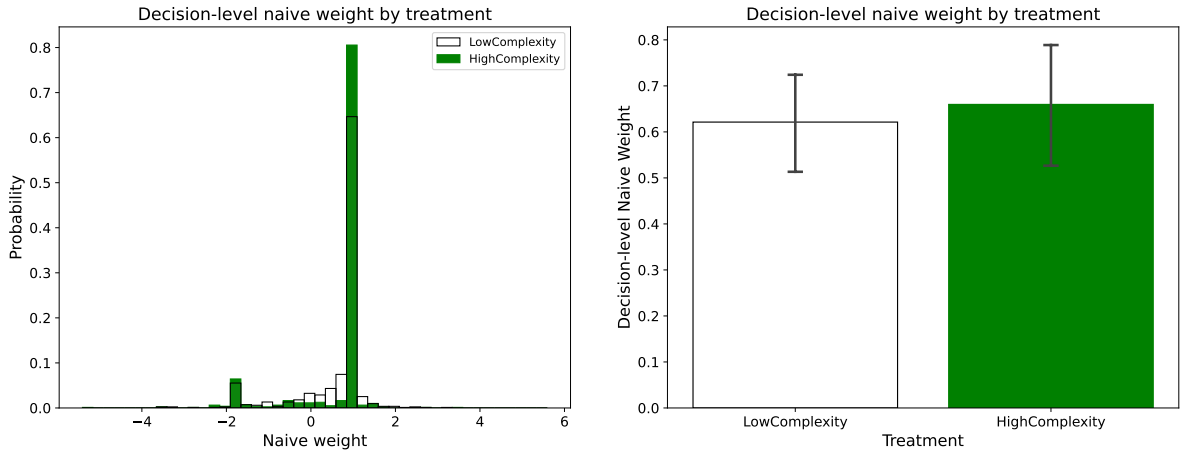


Figure B.18: The relationship between decisions and beliefs in the restricted sample of the Baseline Confidence Experiment. *The figure shows a binned scatterplot using the restricted sample of the Baseline Confidence Experiment with 336 participants. It has the probability guess that "The CEO is key" is the more likely model on the horizontal axis, and the decision weight γ as defined in Equation 3 on the vertical axis. The lines show LOWESS regressions based on all datapoints.*

B.7 Incentivized Confidence: Additional Results in Restricted Sample

Here, we present the results for the restricted sample of the Incentivized Confidence Experiment, featuring 203 participants who solved both of the example screens.



(a) Distribution of decision-level naive weights

(b) Mean decision-level naive weights

Figure B.19: Decision-level naive weights in the restricted sample of the Incentivized Confidence Experiment. *Panel (a) plots the distribution of naive weights λ calculated as specified in Equation 2, using the restricted sample of the Incentivized Confidence Experiment with 203 participants. Panel (b) plots average naive weights.*

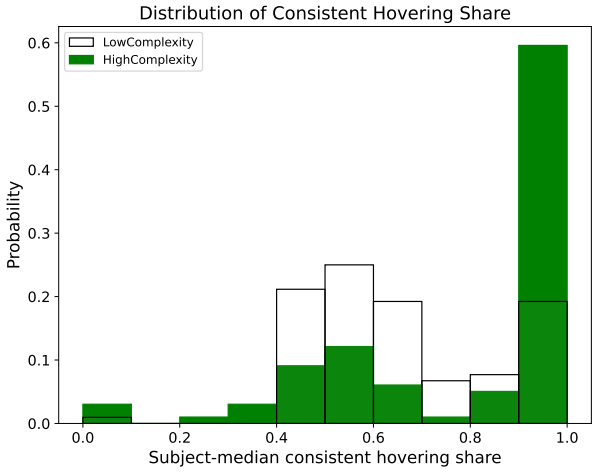


Figure B.20: Distribution of subject-medians of the consistent hovering shares in the restricted sample of the Incentivized Confidence Experiment. *The figure plots the distribution of the share of time that respondents spent looking at the values of the signal-consistent model, using the restricted sample of the Incentivized Confidence Experiment with 203 participants. Only the median consistent share for each participant is plotted.*

Table B.8: Company Value Guesses in the Restricted Sample of the Incentivized Confidence Experiment

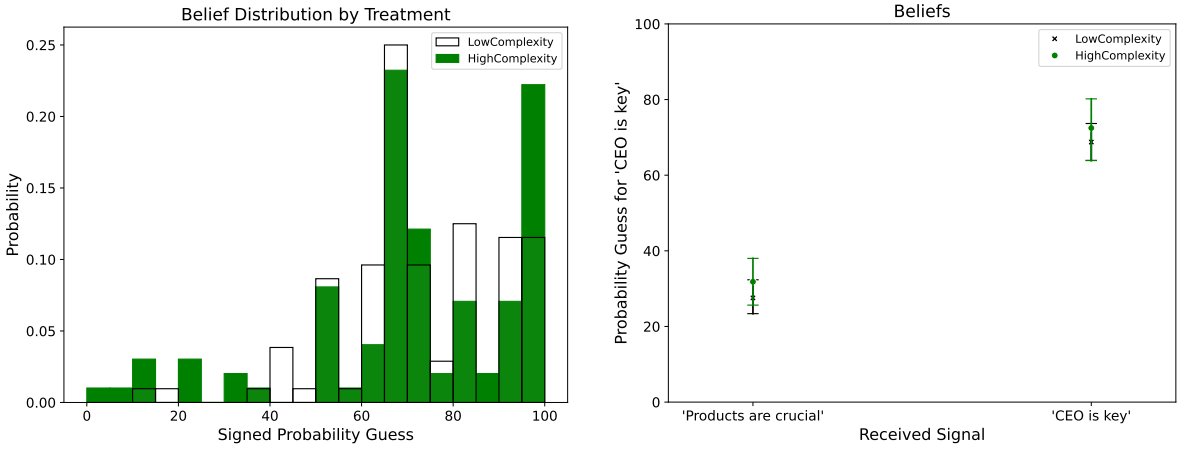
Dependent variable:	Company Value Guess		
Sample:	LowComplexity (1)	HighComplexity (2)	Pooled (3)
Rational Benchmark	0.488***	0.404***	0.488***
	(0.069)	(0.080)	(0.069)
Naive Benchmark	0.593***	0.638***	0.593***
	(0.054)	(0.069)	(0.054)
Rational B. × HighComplexity			-0.084
			(0.106)
Naive B. × HighComplexity			0.045
			(0.087)
R^2	0.912	0.898	0.905
Observations	832	792	1624

The table presents OLS regressions of respondents' company value guesses on the rational and naive benchmarks as detailed in Section 3.1. The table is based on the restricted sample of the Incentivized Confidence Experiment. Column (1) uses observations from the LowComplexity treatment, column (2) from the HighComplexity treatment, and column (3) from both. Stars highlight significant differences from 0 with * for $p < 0.10$, ** for $p < 0.05$, *** for $p < 0.01$. Standard errors are clustered on the subject level.

Table B.9: Beliefs and Recall in the Restricted Sample of the Incentivized Confidence Experiment

Dependent variable:	Probability Guess	Correct Recall
Sample:	Pooled (1)	Pooled (2)
Constant	70.327***	0.962***
	(1.766)	(0.019)
HighComplexity	-0.238	0.018
	(3.036)	(0.024)
R^2	0.000	0.003
Observations	203	203

The table presents OLS regressions using the restricted sample of the Incentivized Confidence Experiment. In column (1), the dependent variable is the probability guess for the likely state. Column (2) uses a dummy for whether respondents correctly recall the more likely model. All columns use observations from both the HighComplexity and LowComplexity conditions. Stars highlight significant differences from 0 with * for $p < 0.10$, ** for $p < 0.05$, *** for $p < 0.01$. Standard errors are clustered on the subject level.



(a) Histogram of signed probability guesses.

(b) Mean probability guesses for "The CEO is key".

Figure B.21: Beliefs in the restricted sample of the Incentivized Confidence Experiment. *In Panel (a) beliefs are converted into the direction of the more likely model, so that 65 corresponds to the Bayesian probability. Panel (b) plots mean probability guesses for the model "The CEO is key". The figure is based on the restricted sample of the Incentivized Confidence Experiment with 203 participants.*

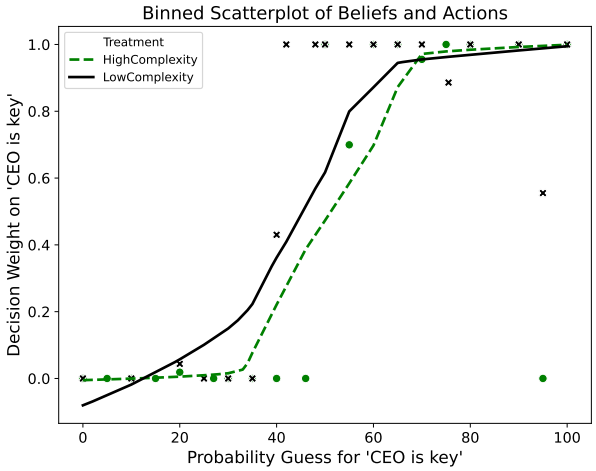
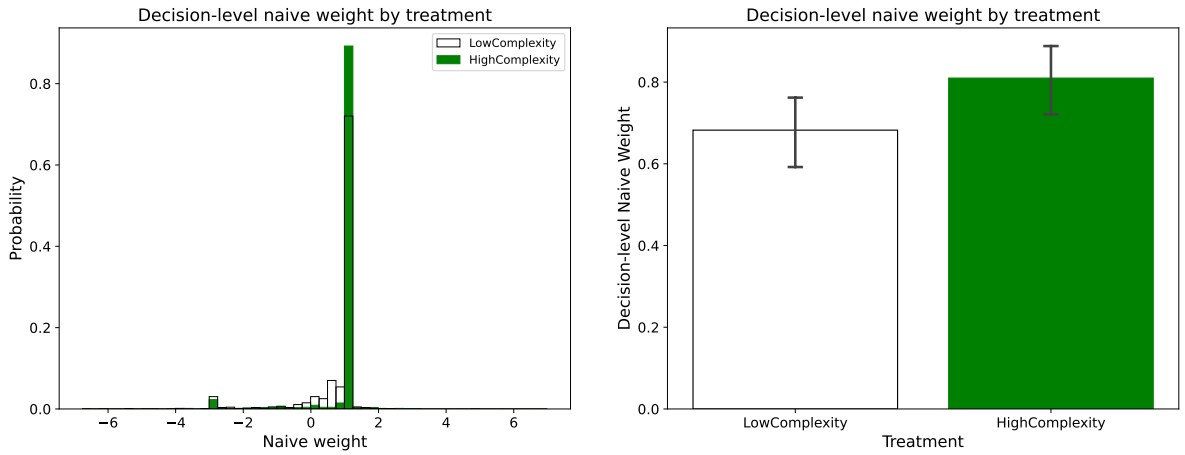


Figure B.22: The relationship between decisions and beliefs in the restricted sample of the Incentivized Confidence Experiment. *The figure shows a binned scatterplot using the restricted sample of the Incentivized Confidence Experiment with 203 participants. It has the probability guess that "The CEO is key" is the more likely model on the horizontal axis, and the decision weight γ as defined in Equation 3 on the vertical axis. The lines show LOWESS regressions based on all datapoints.*

B.8 Baseline Confidence 75% Experiment: Results in Restricted Sample

Here, we present the results for the restricted sample of the Baseline Confidence 75% Experiment, featuring 352 participants who solved both of the example screens.



(a) Distribution of decision-level naive weights

(b) Mean decision-level naive weights

Figure B.23: Decision-level naive weights in the restricted sample of the Baseline Confidence 75% Experiment. *Panel (a) plots the distribution of naive weights λ calculated as specified in Equation 2, using the restricted sample of the Baseline Confidence 75% Experiment with 352 participants. Panel (b) plots average naive weights.*

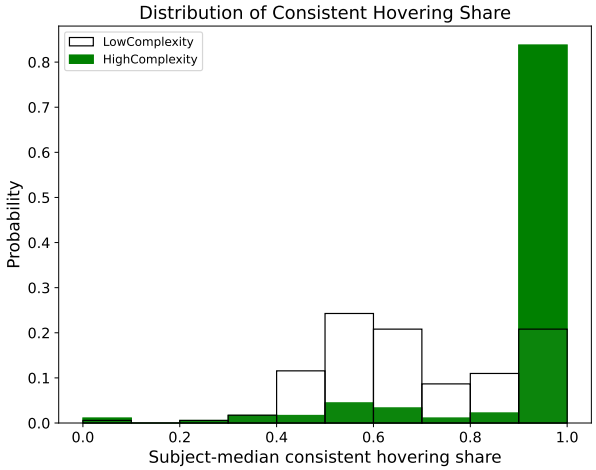


Figure B.24: Distribution of subject-medians of the consistent hovering shares in the restricted sample of the Baseline Confidence 75% Experiment. *The figure plots the distribution of the share of time that respondents spent looking at the values of the signal-consistent model, using the restricted sample of the Baseline Confidence 75% Experiment with 352 participants. Only the median consistent share for each participant is plotted.*

Table B.10: Company Value Guesses in the Restricted Sample of the Baseline Confidence 75% Experiment

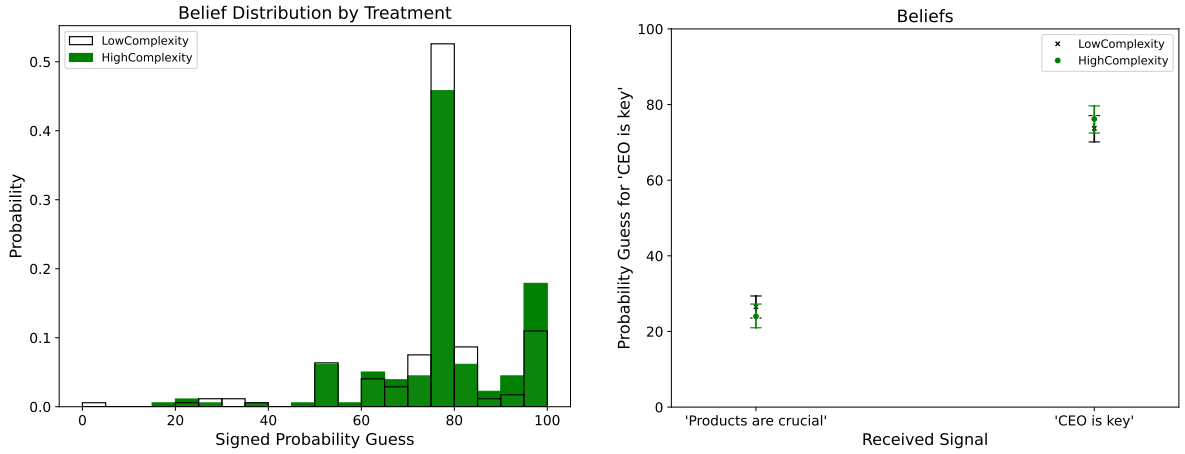
Dependent variable:	Company Value Guess		
Sample:	LowComplexity (1)	HighComplexity (2)	Pooled (3)
Rational Benchmark	0.366***	0.213***	0.366***
	(0.051)	(0.040)	(0.051)
Naive Benchmark	0.660***	0.792***	0.660***
	(0.046)	(0.039)	(0.045)
Rational B. × HighComplexity			-0.153**
			(0.065)
Naive B. × HighComplexity			0.132**
			(0.060)
R^2	0.947	0.951	0.949
Observations	1384	1432	2816

The table presents OLS regressions of respondents' company value guesses on the rational and naive benchmarks as detailed in Section 3.1. The table is based on the restricted sample of the Baseline Confidence 75% Experiment. Column (1) uses observations from the LowComplexity treatment, column (2) from the HighComplexity treatment, and column (3) from both. Stars highlight significant differences from 0 with * for $p < 0.10$, ** for $p < 0.05$, *** for $p < 0.01$. Standard errors are clustered on the subject level.

Table B.11: Beliefs and Recall in the Restricted Sample of the Baseline Confidence 75% Experiment

Dependent variable:	Probability Guess	Correct Recall
Sample:	Pooled (1)	Pooled (2)
Constant	73.601^{***} (1.177)	0.960^{***} (0.015)
HighComplexity	2.497 (1.679)	0.024 (0.018)
R^2	0.006	0.005
Observations	352	352

The table presents OLS regressions using the restricted sample of the Baseline Confidence 75% Experiment. In column (1), the dependent variable is the probability guess for the likely state. Column (2) uses a dummy for whether respondents correctly recall the more likely model. All columns use observations from both the HighComplexity and LowComplexity conditions. Stars highlight significant differences from 0 with * for $p < 0.10$, ** for $p < 0.05$, *** for $p < 0.01$. Standard errors are clustered on the subject level.



(a) Histogram of signed probability guesses.

(b) Mean probability guesses for "The CEO is key".

Figure B.25: Beliefs in the restricted sample of the Baseline Confidence 75% Experiment. *In Panel (a) beliefs are converted into the direction of the more likely model, so that 75 corresponds to the Bayesian probability. Panel (b) plots mean probability guesses for the model "The CEO is key". The figure is based on the restricted sample of the Baseline Confidence 75% Experiment with 352 participants.*

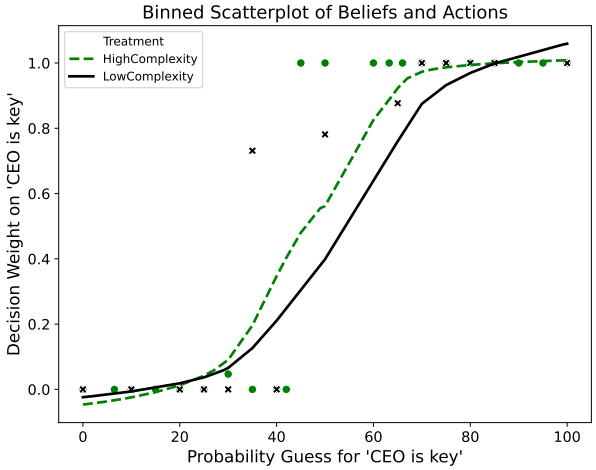


Figure B.26: The relationship between decisions and beliefs in the restricted sample of the Baseline Confidence 75% Experiment. *The figure shows a binned scatterplot using the restricted sample of the Baseline Confidence 75% Experiment with 352 participants. It has the probability guess that "The CEO is key" is the more likely model on the horizontal axis, and the decision weight γ as defined in Equation 3 on the vertical axis. The lines show LOWESS regressions based on all datapoints.*

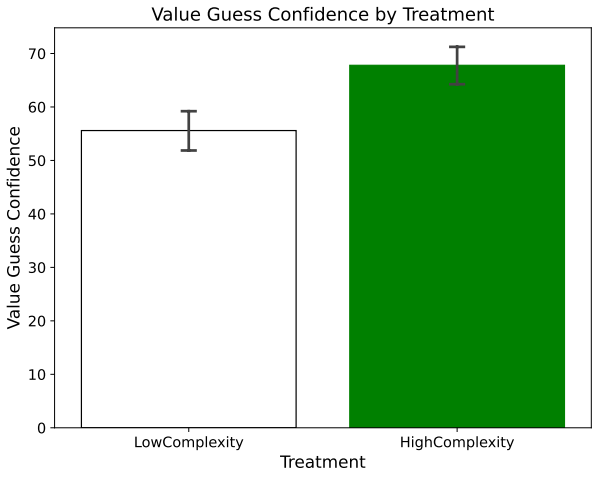
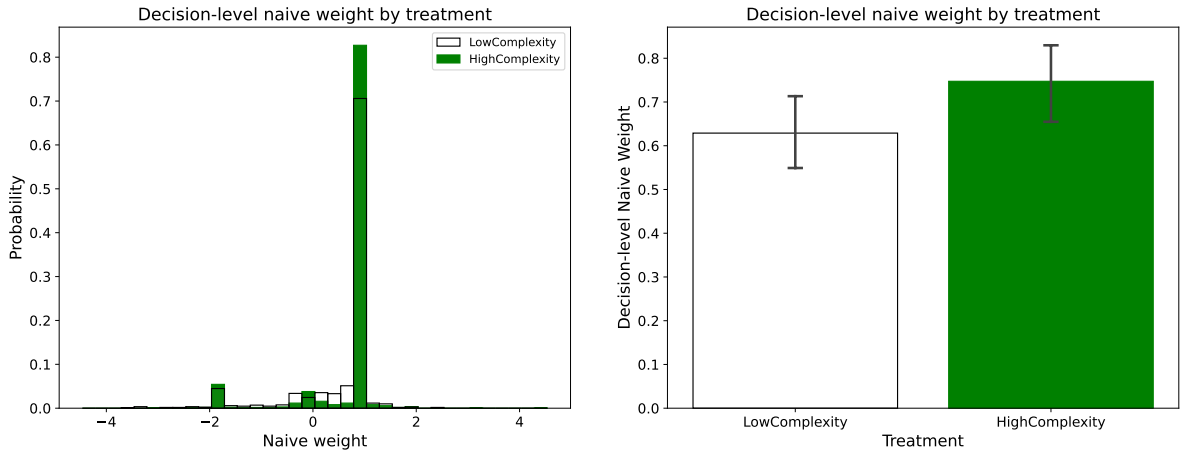


Figure B.27: Average value guess confidence in the restricted sample of the Baseline Confidence 75% Experiment. *The figure plots the average confidence that respondents had in their company value guesses, using the restricted sample of the Baseline Confidence 75% Experiment with 352 participants.*

B.9 No Hover Experiment: Results in Restricted Sample

Here, we present the results for the restricted sample of the No Hover Experiment, featuring 429 participants who solved both of the example screens.



(a) Distribution of decision-level naive weights

(b) Mean decision-level naive weights

Figure B.28: Decision-level naive weights in the restricted sample of the No Hover Experiment. *Panel (a) plots the distribution of naive weights λ calculated as specified in Equation 2, using the restricted sample of the No Hover Experiment with 429 participants. Panel (b) plots average naive weights.*

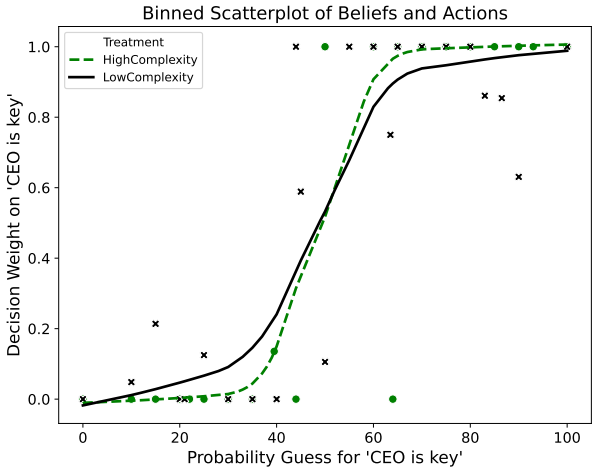


Figure B.30: The relationship between decisions and beliefs in the restricted sample of the No Hover Experiment. *The figure shows a binned scatterplot using the restricted sample of the No Hover Experiment with 429 participants. It has the probability guess that "The CEO is key" is the more likely model on the horizontal axis, and the decision weight γ as defined in Equation 3 on the vertical axis. The lines show LOWESS regressions based on all datapoints.*

Table B.12: Company Value Guesses in the Restricted Sample of the No Hover Experiment

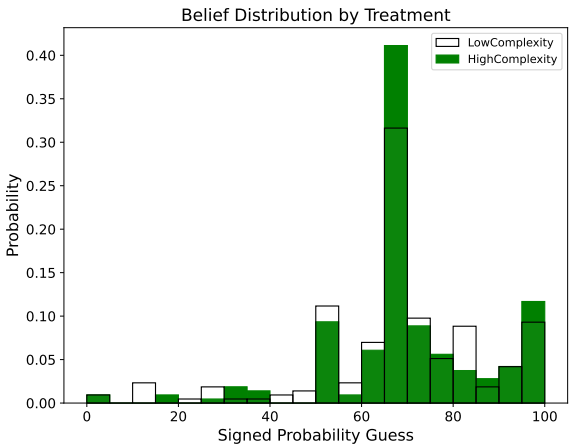
Dependent variable:	Company Value Guess		
Sample:	LowComplexity (1)	HighComplexity (2)	Pooled (3)
Rational Benchmark	0.444*** (0.048)	0.274*** (0.046)	0.444*** (0.048)
Naive Benchmark	0.616*** (0.040)	0.740*** (0.043)	0.616*** (0.040)
Rational B. × HighComplexity			-0.170** (0.066)
Naive B. × HighComplexity			0.124** (0.059)
R^2	0.915	0.924	0.920
Observations	1720	1712	3432

The table presents OLS regressions of respondents' company value guesses on the rational and naive benchmarks as detailed in Section 3.1. The table is based on the restricted sample of the No Hover Experiment. Column (1) uses observations from the LowComplexity treatment, column (2) from the HighComplexity treatment, and column (3) from both. Stars highlight significant differences from 0 with * for $p < 0.10$, ** for $p < 0.05$, *** for $p < 0.01$. Standard errors are clustered on the subject level.

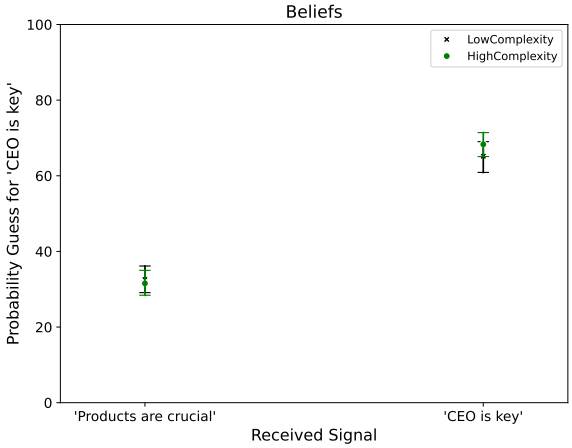
Table B.13: Beliefs and Recall in the Restricted Sample of the No Hover Experiment

Dependent variable:	Probability Guess	Correct Recall
Sample:	Pooled (1)	Pooled (2)
Constant	66.298*** (1.322)	0.940*** (0.016)
HighComplexity	2.082 (1.792)	0.018 (0.021)
R^2	0.003	0.002
Observations	429	429

The table presents OLS regressions using the restricted sample of the No Hover Experiment. In column (1), the dependent variable is the probability guess for the likely state. Column (2) uses a dummy for whether respondents correctly recall the more likely model. All columns use observations from both the HighComplexity and LowComplexity conditions. Stars highlight significant differences from 0 with * for $p < 0.10$, ** for $p < 0.05$, *** for $p < 0.01$. Standard errors are clustered on the subject level.



(a) Histogram of signed probability guesses.



(b) Mean probability guesses for "The CEO is key".

Figure B.29: Beliefs in the Restricted Sample of the No Hover Experiment. *In Panel (a) beliefs are converted into the direction of the more likely model, so that 65 corresponds to the Bayesian probability. Panel (b) plots mean probability guesses for the model "The CEO is key". The figure is based on the restricted sample of the No Hover Experiment with 429 participants.*

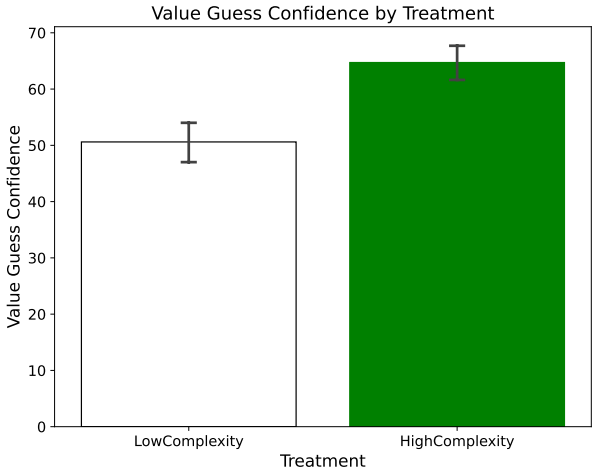
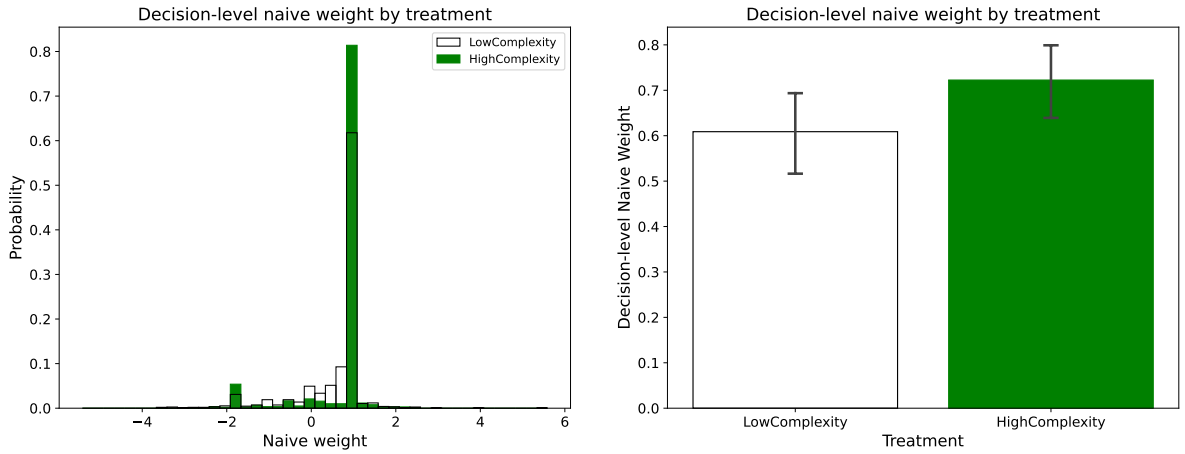


Figure B.31: Average value guess confidence in the restricted sample of the No Hover Experiment. *The figure plots the average confidence that respondents had in their company value guesses, using the restricted sample of the No Hover Experiment with 429 participants.*

B.10 Beliefs First Experiment: Results in Restricted Sample

Here, we present the results for the restricted sample of the Beliefs First Experiment, featuring 364 participants who solved both of the example screens.



(a) Distribution of decision-level naive weights

(b) Mean decision-level naive weights

Figure B.32: Decision-level naive weights in the restricted sample of the Beliefs First Experiment. *Panel (a) plots the distribution of naive weights λ calculated as specified in Equation 2, using the restricted sample of the Beliefs First Experiment with 364 participants. Panel (b) plots average naive weights.*

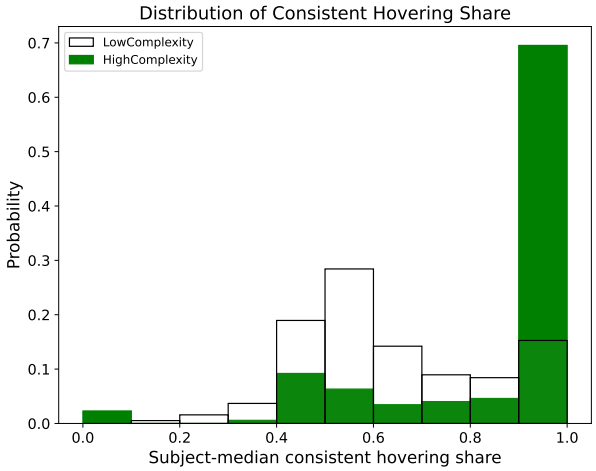
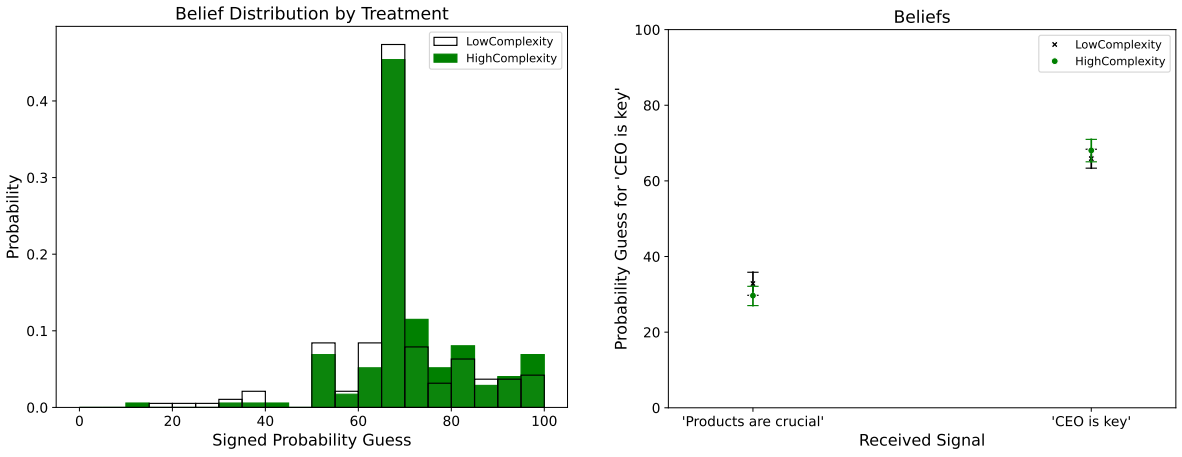


Figure B.33: Distribution of subject-medians of the consistent hovering shares in the restricted sample of the Beliefs First Experiment. *The figure plots the distribution of the share of time that respondents spent looking at the values of the signal-consistent model, using the restricted sample of the Beliefs First Experiment with 364 participants. Only the median consistent share for each participant is plotted.*

Table B.14: Company Value Guesses in the Restricted Sample of the Beliefs First Experiment

Dependent variable:	Company Value Guess		
Sample:	LowComplexity (1)	HighComplexity (2)	Pooled (3)
Rational Benchmark	0.478*** (0.052)	0.301*** (0.044)	0.478*** (0.052)
Naive Benchmark	0.580*** (0.043)	0.736*** (0.038)	0.580*** (0.043)
Rational B. × HighComplexity			-0.177*** (0.068)
Naive B. × HighComplexity			0.155*** (0.057)
R^2	0.913	0.925	0.919
Observations	1520	1392	2912

The table presents OLS regressions of respondents' company value guesses on the rational and naive benchmarks as detailed in Section 3.1. The table is based on the restricted sample of the Beliefs First Experiment. Column (1) uses observations from the LowComplexity treatment, column (2) from the HighComplexity treatment, and column (3) from both. Stars highlight significant differences from 0 with * for $p < 0.10$, ** for $p < 0.05$, *** for $p < 0.01$. Standard errors are clustered on the subject level.



(a) Histogram of signed probability guesses.

(b) Mean probability guesses for "The CEO is key".

Figure B.34: Beliefs in the Restricted Sample of the Beliefs First Experiment. *In Panel (a) beliefs are converted into the direction of the more likely model, so that 65 corresponds to the Bayesian probability. Panel (b) plots mean probability guesses for the model "The CEO is key". The figure is based on the restricted sample of the Beliefs First Experiment with 364 participants.*

Table B.15: Beliefs and Recall in the Restricted Sample of the Beliefs First Experiment

Dependent variable:	Probability Guess	Correct Recall
Sample:	Pooled (1)	Pooled (2)
Constant	66.542***	0.968***
	(1.012)	(0.013)
HighComplexity	2.596*	0.020
	(1.437)	(0.015)
R^2	0.009	0.005
Observations	364	364

The table presents OLS regressions using the restricted sample of the Beliefs First Experiment. In column (1), the dependent variable is the probability guess for the likely state. Column (2) uses a dummy for whether respondents correctly recall the more likely model. All columns use observations from both the HighComplexity and LowComplexity conditions. Stars highlight significant differences from 0 with * for $p < 0.10$, ** for $p < 0.05$, *** for $p < 0.01$. Standard errors are clustered on the subject level.

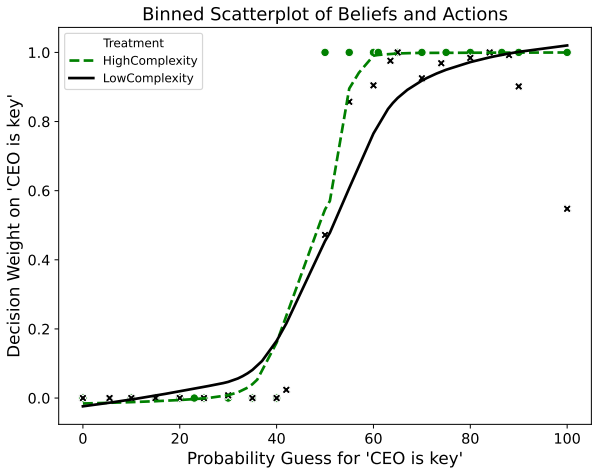


Figure B.35: The relationship between decisions and beliefs in the restricted sample of the Beliefs First Experiment. *The figure shows a binned scatterplot using the restricted sample of the Beliefs First Experiment with 364 participants. It has the probability guess that "The CEO is key" is the more likely model on the horizontal axis, and the decision weight γ as defined in Equation 3 on the vertical axis. The lines show LOWESS regressions based on all datapoints.*

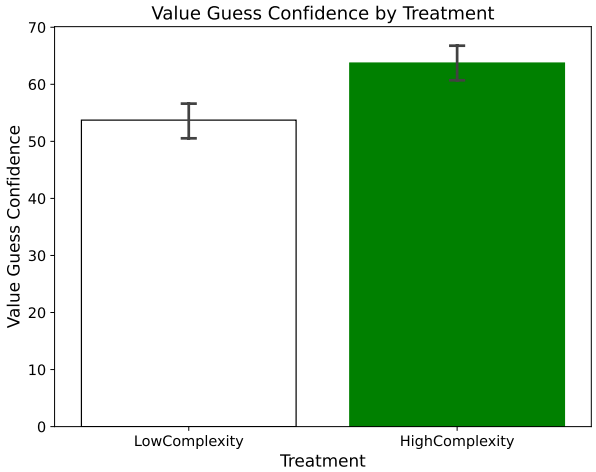


Figure B.36: Average value guess confidence in the restricted sample of the Beliefs First Experiment. *The figure plots the average confidence that respondents had in their company value guesses, using the restricted sample of the Beliefs First Experiment with 364 participants.*

C LLM-based Coding of Open Text Responses

Table C.1: LLM-Coded Open Text Responses: Value Guess Explanations

Dimension	HighComplexity	LowComplexity	Difference (SE)	p-Value
Simplification	0.791	0.716	+0.074 (0.043)	0.083*
Averaging	0.040	0.120	−0.080 (0.027)	0.003***
Effort-based Simplification	0.015	0.029	−0.014 (0.014)	0.340

Notes: Share of subjects coded 1 on each binary dimension, by treatment condition. Difference (SE) is the OLS coefficient on *HighComplexity* with study fixed effects and robust standard errors, pooling NoHover and BeliefsFirst ($N = 409$). Question wording: *"You just guessed the values of 8 companies. On this screen, we are interested in how you approached guessing the company values. Please briefly describe how you arrived at your guesses."* The share of Simplification (Averaging) responses is correlated with subjects' median naive weight at $r = 0.48$ ($r = -0.34$). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

C.1 Overview

At the end of the NoHover and BeliefsFirst studies, participants completed an open-ended text elicitation. Subjects were randomly assigned between subjects to explain either (a) how they formed their value guesses, or (b) why they reported the confidence level they did. We use a large language model (GPT-4o, temperature = 0) to code each response on a set of theoretically motivated binary dimensions. Setting temperature to zero ensures that the coding is fully deterministic: running the same response through the same prompt always yields the same code.

All analyses use the strict sample (both high-complexity practice screens answered correctly) and pool both studies with study fixed effects and HC3 standard errors. Sample sizes are $N = 409$ for the actions elicitation and $N = 384$ for the confidence elicitation.

C.2 Procedure

Each response was coded in a single API call. The LLM was provided with (i) a description of the experiment, (ii) the coding dimensions with instructions, and (iii) the response text. It was asked to return a JSON object with the dimension names as keys and binary (0/1) values. We validated that all required keys were present and that values were in $\{0, 1\}$, retrying up to three times on failure. The full experiment context provided to the model in every call is reproduced below.

Experiment context (provided verbatim to GPT-4o):

You are coding open-text responses from an economics experiment on model uncertainty.

Experiment setup. Participants estimated the value of 8 fictitious companies. The correct value was determined by one of two models ("The CEO is key" or "Products are crucial"). Participants received a noisy signal (65% accurate) indicating which model was more likely correct, but both models remained possible.

Two complexity conditions.

- HighComplexity: participants had to calculate model estimates themselves using formulas and variable values (cognitively demanding).
- LowComplexity: participants were given the pre-calculated model estimates and only needed to combine them (less demanding).

The rational strategy is to weight both model estimates by their probabilities (65%/35%). The naive/simplifying strategy is to act as if the signal-consistent model is definitely correct and ignore the other model entirely.

Key finding. HighComplexity participants simplify more (act as if one model is correct) and paradoxically report higher confidence in their guesses.

C.3 Coding Dimensions

C.3.1 Actions elicitation

Simplification. Did the subject describe following or using the signal-consistent model (the more likely one indicated by the ball draw) as their approach, without combining it with the other model? This includes responses where the subject describes going with, following, or relying on the more likely model — even if they do not explicitly say they ignored the other one. Includes responses like "I just used the CEO formula", "I went with the more likely model", "I relied on the signal-indicated rule", "I followed the likely formula and calculated from there". Do *not* code 1 if the subject: (a) mentions combining, averaging, or weighting both models, (b) describes using different models for different companies, or (c) describes computing both models' estimates. Code 1 if yes, 0 if no.

Averaging. Did the subject describe explicitly computing a numerical combination or weighted average of *both* model estimates? This requires more than just "considering both" — the subject must describe actually mixing or blending the two values, e.g. by weighting them by their probabilities. *Examples:* "I took 65% of one estimate and 35% of the other"; "I averaged the two values"; "I weighted the estimates by the probabilities"; "I combined the CEO and Patents values." Code 1 if yes, 0 if no.

Effort-based Simplification. Did the subject mention that the task was too effortful, complex, or time-consuming, and that this is why they focused on one model or simplified their approach? *Examples:* "it was too much work to calculate both formulas"; "the calculation was too complex so I just used one"; "it felt easier to just go with the likely model"; "I didn't want to spend time computing both." Do *not* code 1 for subjects who simply describe using one model without mentioning effort or difficulty as a reason. Code 1 if yes, 0 if no.

C.3.2 Confidence elicitation

Model Uncertainty. Did the subject acknowledge uncertainty about which model was correct, or that the other model might still be right? *Examples:* "I wasn't sure which rule was correct"; "there was still a chance the other model applied"; "both models were still possible"; "I can only be 65% sure." Do *not* code 1 for subjects who cite the signal to justify high confidence with no acknowledgment of uncertainty, or for subjects who express uncertainty only about their calculations rather than which model applied. Code 1 if yes, 0 if no.

High Calculation Quality. Did the subject explain *high* confidence by referring to how carefully or accurately they performed their calculations? *Examples:* "I calculated carefully so I am confident"; "I followed the formula correctly"; "I double-checked my math." Code 1 if yes, 0 if no.