Internet Appendix

"Macroeconomic Expectations and Credit Card Spending"

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A Proof of Propositions

A.1 Lemma 1

The three statements are true:
(1) C_t^N and C_t^T are non-decreasing in π_{t+1}^N and π_{t+1}^T.
(2) X_t^N is increasing in π_{t+1}^N. X_t^T is increasing in π_{t+1}^T.
(3) X_t^N is non-decreasing in π_{t+1}^T. X_t^T is non-decreasing in π_{t+1}^N.

Proof:

Observe that Cobb-Douglas structure of preferences allows us to write a closed form solution for C_t^N:

$$C_t^N = \frac{\alpha\theta}{\sum_{k=0}^{\infty}\beta^k}\frac{\sum_{k=0}^{\infty}P_{t+k}^N Y_{t+k}/\prod_{i=1}^{k}R_{t+i}}{P_t^N} =$$

$$\frac{\alpha\theta}{\sum_{k=0}^{\infty}\beta^k}\sum_{k=0}^{\infty}\frac{\prod_{i=1}^{k}\pi_{t+i}^N Y_{t+k}}{\prod_{i=1}^{k}R_{t+i}}$$

Hence:

$$\frac{dC_t^N}{d\pi_{t+1}^N} = \frac{\alpha\theta}{\sum_{k=0}^{\infty}\beta^k}\sum_{k=0}^{\infty}\frac{\prod_{i=2}^{k}\pi_{t+i}^N Y_{t+k}}{\prod_{i=1}^{k}R_{t+i}} > 0 \quad \frac{dC_t^N}{d\pi_{t+1}^T} = 0$$

From the first order conditions, one can obtain:

$$\frac{\theta}{1-\theta}\frac{C_t^T}{C_t^N} = \frac{P_t^N}{P_t^T}$$

This implies similar conditions for C_t^T:

$$\frac{dC_t^T}{d\pi_{t+1}^N} > 0 \quad \text{and} \quad \frac{dC_t^T}{d\pi_{t+1}^T} = 0,$$

which concludes the proof of statement (1).

From the first order conditions we obtain:

$$\frac{(1-\alpha)C_t^N}{\alpha X_t^N} = \left(1-(1-\delta)\frac{\pi_{t+1}^N}{R_{t+1}}\right)$$

$$\frac{(1-\alpha)C_t^T}{\alpha X_t^T} = \left(1-(1-\delta)\frac{\pi_{t+1}^T}{R_{t+1}}\right)$$

This implies that for $I \in \{N, T\}$, $\frac{X_t^I}{C_t^I}$ increases in π_{t+1}^I. Since by statement (1), C_t^I does not decrease in π_{t+1}^I, X_t^I has to increase. This proves statement (2).

Finally, since i) the conditions pin down the $\frac{X_t^I}{C_t^I}$ for fixed π_{t+1}^I, and ii) C_t^I is non-decreasing in π_{t+1}^{-I}, X_t^I does not decrease in π_{t+1}^{-I} ($-I$ denotes $\{N, T\} \setminus I$), which proves statement (3).

A.2 Proof of proposition 1

By Assumption 1, an increase in π_{t+1} does not decrease π_{t+1}^I, $I \in \{N, T\}$ and has to strictly increase at least one of them. By Lemma 1, this implies that X_t^I do not decrease and at least one of them increases. Since X_{t-1}^I and P_t^I are fixed, the same is true for $P_t^I \Delta X_t^I$. Hence, $P_t^N \Delta X_t^N + P_t^T \Delta X_t^T$ increases in π_{t+1}.

A.3 Proof of proposition 2

By Assumption 2, π_{t+1}^T increases in E_{t+1}. By Lemma 1, this implies that X_t^T increases in E_{t+1}. Hence $P_t^T \Delta X_t^T$ increases in E_{t+1}.

A.4 Proof of proposition 3

$$A_{t+1} = P_t Y_t + R_t A_t - P_t^N (C_t^N + X_t^N - X_{t-1}^N + \delta X_t^N) -$$
$$- P_t^T (C_t^T + X_t^T - X_{t-1}^T + \delta X_t^T)$$

By Assumption 1, neither π_{t+1}^T nor π_{t+1}^T decrease, and at least one of them increases with π_{t+1}. This and Lemma 1 imply that neither of C_t^I and X_t^I, $I \in \{N, T\}$ decreases, and at least one of X_t^I increases. Hence, A_{t+1} decreases and $A_t - A_{t+1}$ increases.

B Theoretical Model: Relaxing Log-Specification

In this subsection, we show that the effects of the inflation and exchange rate depreciation are theoretically ambiguous. To do so, we relax the log-log specification assumption by adopting constant relative risk aversion utility form. For tractability, we consider a two-period case. The consumer's utility is:

$$\frac{C_0^{1-\rho}}{1-\rho} + \beta \frac{C_1^{1-\rho}}{1-\rho} \tag{B.1}$$

where as before in our framework, C_t represents consumption in period t, β is the discount factor, and ρ is the risk aversion parameter.

Given the income Y_0 and Y_1, price level P_0 and P_1, and nominal interest rate R, the representative agent chooses the optimal consumptions C_0 and C_1 and asset holding A_1 to maximize utility subject to budget constraints,

$$P_0 C_0 + A_1 = P_0 Y_0 \tag{B.2}$$
$$P_1 C_1 = \theta P_1 Y_1 + (1-\theta) P_0 Y_1 + R A_1 \tag{B.3}$$

Here parameter θ represents the degree of nominal wage rigidity, where a lower value of θ indicates a higher influence of the initial period's price level on the nominal wages in the second period.

We treat the good C_0 as the numeraire and set $P_0 = 1$. This allows us to simplify the equations using $\pi = \frac{P_1}{P_0} = P_1$. The Lagrangian for the above utility maximization problem is as follows:

$$L = \frac{C_0^{1-\rho}}{1-\rho} + \beta \frac{C_1^{1-\rho}}{1-\rho} + \lambda_0(Y_0 - C_0 - A_1) + \lambda_1(\theta P_1 Y_1 + (1-\theta)Y_1 + RA_1 - \pi C_1) \tag{B.4}$$

The corresponding first-order conditions are:

C_0 :

$$C_0^{-\rho} = \lambda_0 \tag{B.5}$$

C_1 :

$$\beta C_1^{-\rho} = \lambda_1 \pi \tag{B.6}$$

A_1 :

$$\lambda_0 = R\lambda_1 \tag{B.7}$$

Combining budget constraints B.2 and B.3, and the First Order Conditions, we have:

$$C_0 = \frac{\theta \pi Y_1 + (1-\theta)Y_1 + RY_0}{\pi^{\frac{\rho-1}{\rho}} R^{\frac{1}{\rho}} \beta^{\frac{1}{\rho}} + R} \tag{B.8}$$

From budget constraint B.2 we also have the solution for A_1:

$$A_1 = Y_0 - \frac{\theta \pi Y_1 + (1-\theta)Y_1 + RY_0}{\pi^{\frac{\rho-1}{\rho}} R^{\frac{1}{\rho}} \beta^{\frac{1}{\rho}} + R} \tag{B.9}$$

The derivative of C_0 with respect to π is:

$$\frac{dC_0}{d\pi} = \frac{\theta Y_1}{R + \beta^{\frac{1}{\rho}} \pi^{\frac{\rho-1}{\rho}} R^{\frac{1}{\rho}}} - \frac{\beta^{\frac{1}{\rho}} R^{\frac{1}{\rho}} (\rho - 1)\left(RY_0 + (1-\theta)Y_1 + \pi\theta Y_1\right)}{\pi^{\frac{1}{\rho}} \left(R + \beta^{\frac{1}{\rho}} \pi^{\frac{\rho-1}{\rho}} R^{\frac{1}{\rho}}\right)^2 \rho} \tag{B.10}$$

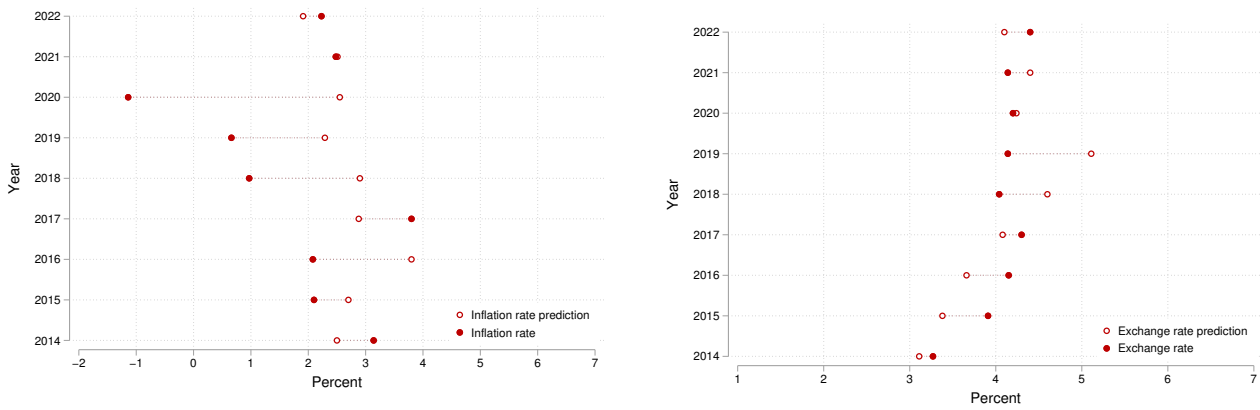
Thus, consumption C_0 decreases and assets A_1 increases with inflation if the following is true:

$$\theta Y_1 \pi^{\frac{1}{\rho}} \left(R + \beta^{\frac{1}{\rho}} \pi^{\frac{\rho-1}{\rho}} R^{\frac{1}{\rho}}\right) \rho - \beta^{\frac{1}{\rho}} R^{\frac{1}{\rho}} (\rho - 1)\left(RY_0 + (1-\theta)Y_1 + \pi\theta Y_1\right) < 0 \tag{B.11}$$

This result implies that the negative effects of inflation on current consumption are theoretically plausible. For instance, it is sufficient to assume $\rho > 1$ and no pass-through of inflation to income ($\theta = 0$). Such a value for ρ is plausible, as Havranek et al. (2015) suggests that $\rho = 2$ is typical. The degree of expected pass-through of inflation, is however, an empirical question, which we address in additional experiments.

C Appendix Figures

Figure IA.1: Accuracy of expert forecasts

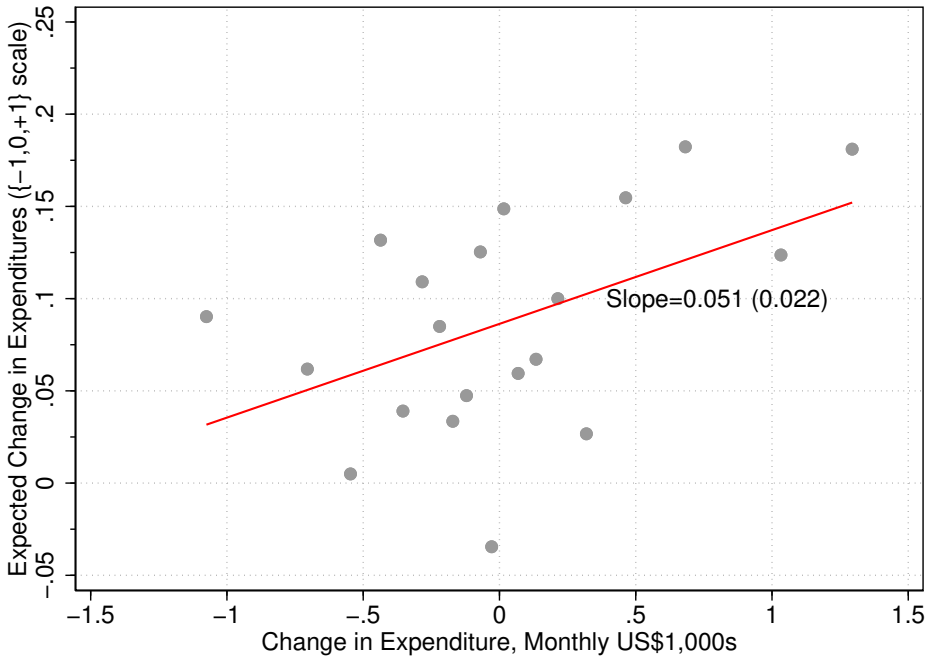


(a) Inflation expectations

(b) Exchange rate expectations

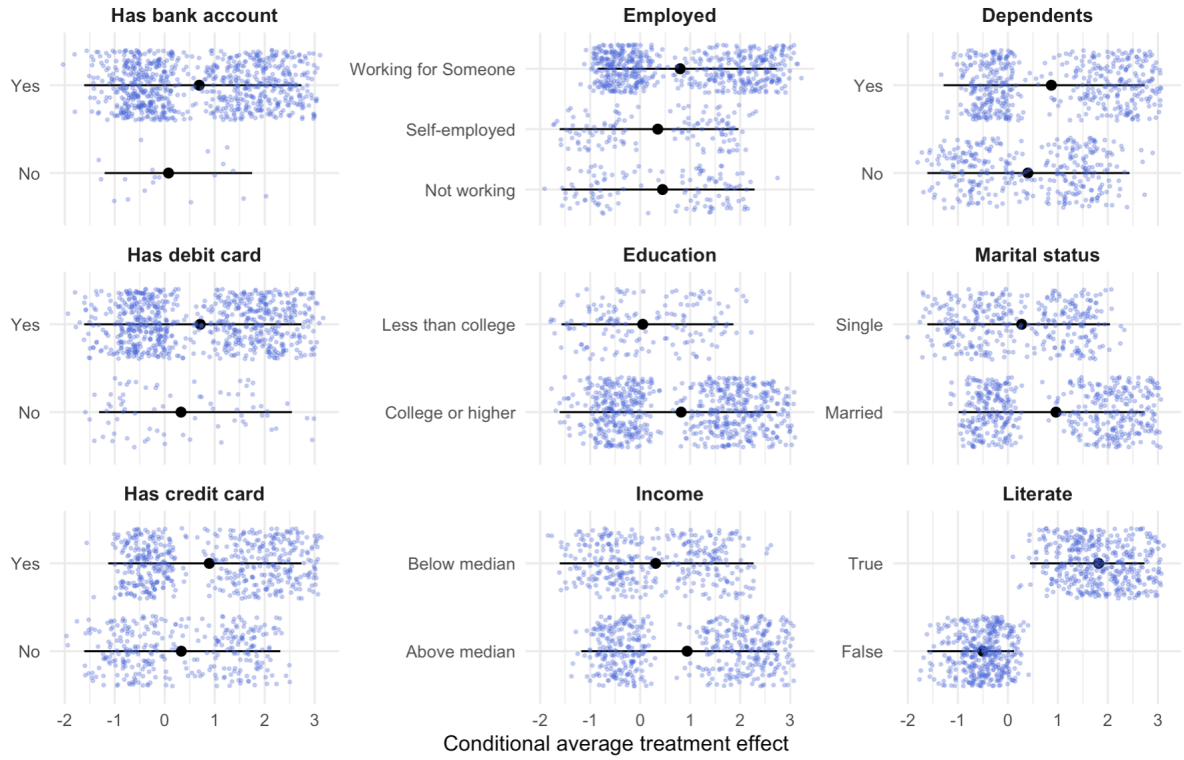
The figure shows the difference between predicted and realized inflation and exchange rates in historical data, taken from the same sources used to provide information in the experiment. Forecasts are recovered for the same time horizon (12 months) at which we provide information in the experiment. Inflation forecasts are taken from Statista (www.statista.com), exchange rate forecasts are taken from Trading Economics (www.tradingeconomics.com).

Figure IA.2: Self-reported spending plans versus actual spending



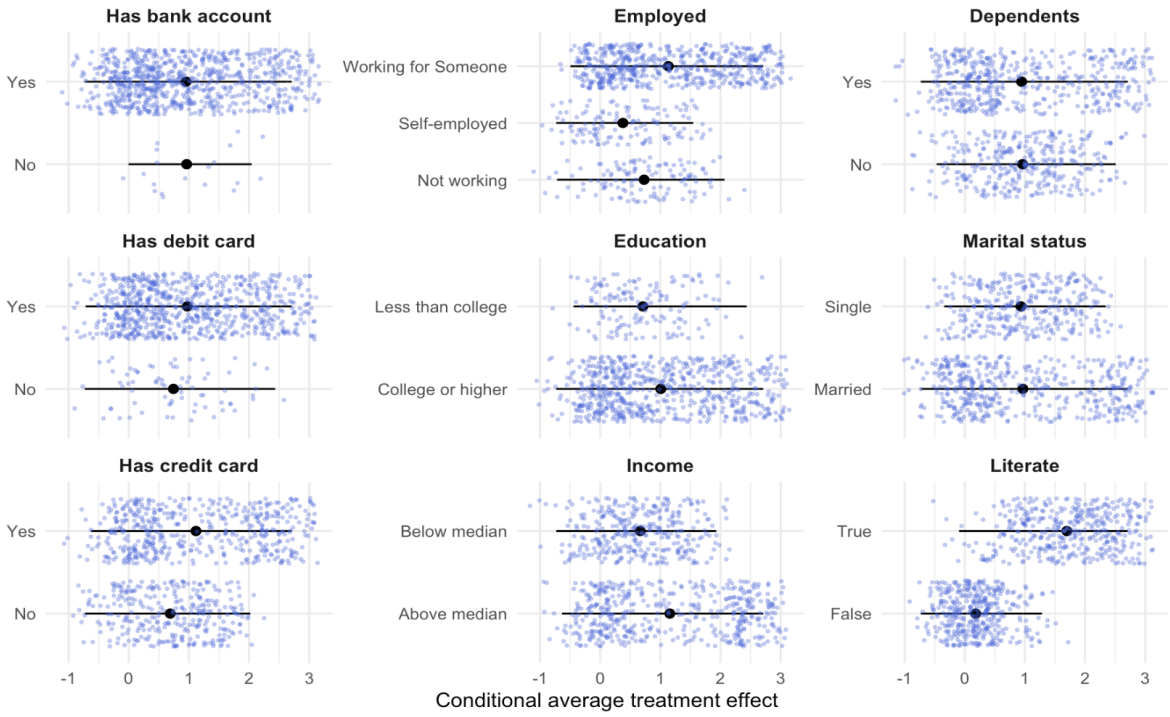
The figure shows the relationship between the actual change in credit card expenditures, measured in administrative data, and self-reported spending plans, based on survey data. The regression controls for surveyor and week fixed effects. Expenditure in administrative data is measured as the difference in average monthly expenditure across three months post-treatment (the post-survey period for which data is available) and average monthly expenditure for the twelve months pre-treatment (the pre-survey period for which data is available). The standard deviation of the variable shown in the x-axis is \$554, and the standard deviation of the variable shown in the y-axis is 0.665. The predicted change in expenditure corresponds to survey responses on planned credit card expenditure, recorded as 1 if a respondent expects to spend more, 0 if they expect to spend about the same, and -1 if they expect to spend less. 'Slope' is the OLS coefficient of the relationship, with robust standard errors in parentheses.

Figure IA.3: Demand for inflation indexed securities, CATE by covariate [inflation]



Conditional Average Treatment Effect (CATE) of inflation on demand for inflation-indexed securities across various covariates. Each subplot displays CATE estimates by group for covariates such as having a bank account, employment status, dependents, debit card, education, marital status, credit card, income, and financial literacy status. The scatter plots represent individual-level CATE values, with the black dot and line indicating the mean and confidence interval for each group.

Figure IA.4: Demand for inflation indexed securities, CATE by covariate [exchange rate]



Conditional Average Treatment Effect (CATE) of exchange rate depreciation on demand for inflation-indexed securities across various covariates. Each subplot displays CATE estimates by group for covariates such as having a bank account, employment status, dependents, debit card, education, marital status, credit card, income, and financial literacy status. The scatter plots represent individual-level CATE values, with the black dot and line indicating the mean and confidence interval for each group.

D Appendix Tables

Table IA.1: Durable and tradable expenditures

	Average monthly expenditure, USD	*Durables (%)*	*Tradables (%)*
	(1)	(2)	(3)
Airline and travel	67	0	0
Apparel	28	100	100
Automotive	39	100	64
Books and stationery	4	100	100
Business service	49	0	0
Camera and photo	2	33	33
Car rental	1	0	0
Computer equipment	11	100	100
Department store	31	100	100
Dept store	29	100	100
Dining	58	0	0
Direct marketing	30	0	0
Education	7	100	0
Electronics	26	100	66
Entertainment	5	0	0
Financial services	14	0	0
Food and beverage	57	0	0
Furniture	18	100	66
Government	22	0	0
Groceries	53	0	0
Health and beauty	29	0	50
Home improvement	15	100	60
Hotel	2	0	0
Insurance	20	0	0
Jewellery and watches	17	100	100
Medical and optical	29	100	16
Music store	2	0	100
Others	11	0	7
Petrol	84	0	100
Retail	25	0	0
Sporting store	8	100	100
Telecommunication	42	100	33
Toys	2	100	100
Utilities	21	0	0
Uncategorized	102	–	–

The table shows average monthly credit card spending by Merchant Category Code (MCC) groups, and the classification of MCC groups according to whether they are tradable or durable. Column (1) shows monthly spending by category. Columns (2) and (3) report the share of purchases in each category that are classified as durable and tradable goods, respectively.

D.1 Event-study falsification tests

we leverage data on pre-treatment spending, which allows us to conduct a falsification test in the spirit of an event-study analysis. We estimate a similar regression as in equation (6) but using pre-treatment instead of post-treatment spending as the dependent variables:

$$\begin{aligned} Y_{i,t-1} &= \alpha_Y^{\pi} \cdot \left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right) \cdot T_{i,t}^{\pi} + \alpha_Y^{d} \cdot \left(d_{i,t}^{signal} - d_{i,t}^{prior}\right) \cdot T_{i,t}^{d} + \\ &\quad \beta_Y^{\pi} \cdot \left(d_{i,t}^{signal} - d_{i,t}^{prior}\right) + \beta_Y^{d} \cdot \left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right) + X_{i,t}\gamma_Y + \epsilon_i \end{aligned} \tag{D.1}$$

The dependent variable $Y_{i,t+1}$ refers to the average monthly spending in the 3 months pre-treatment, and the set of control variables ($X_{i,t}$) include just the number of dependents, week fixed effects, surveyors fixed effects.

The results are presented in Table IA.2. Since the outcomes are measured at a point in time when participants had not yet been provided with information, there should be no effects of the information on pre-treatment spending. As expected, we find no "effects" of the information shocks on the pre-treatment spending outcomes. For example, the first coefficient in column (1) indicates that a 1 pp increase in the inflation shock had an "effect" on pre-treatment spending on durables that is close to zero ($-$ \$0.500, or 0.001 standard deviations) and statistically insignificant. Likewise, the rest of the coefficients from Table IA.2 are close to zero and statistically insignificant.

Table IA.2: Effects of information on behavior

	Transaction data			
	Durables	*Trad. Dur.*	*Debt Repayment*	*Total*
	(3)	(4)	(5)	(6)
$\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right) \cdot T_{i,t}^{\pi}$	–0.500	–1.928	–5.672	–0.674
	(2.618)	(1.940)	(5.861)	(4.956)
$\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right) \cdot T_{i,t}^{d}$	0.642	–1.550	5.581	0.490
	(2.610)	(2.038)	(6.130)	(4.993)
Observations	2,872	2,872	2,872	2,872
R-squared	0.276	0.215	0.495	0.532
Outcome mean	284.400	196.190	1,034.918	955.593
Outcome median	148.144	86.504	652.960	662.605
Outcome st. dev.	353.109	260.235	1,007.288	889.627

The table reports an event study falsification test of the reduced form spending results. Each column corresponds to a separate OLS regression that matches equation (D.1). The term $\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right)$ is the gap between the feedback about inflation rate shown to the individual and the individual's prior belief about the inflation rate. $T_{i,t}^{\pi}$ is an indicator variable that takes the value 1 if the feedback was shown to the subject, and 0 otherwise. The terms $\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right)$ and $T_{i,t}^{d}$ are the corresponding variables for the exchange rate. All regressions control for $\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right)$ and $\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right)$, gender, age, age squared, number of dependents, household size, education, log income, as well as week fixed effects, surveyor fixed effects, and lagged pre-treatment spending in each category. *Durables* are average monthly expenditures on durables. *Trad. Dur.* are average monthly expenditures on tradable durables. *Debt Repayment* is average monthly credit card debt repayment. *Total* is total monthly spending in all categories. To conduct a falsification test, all spending outcomes are measured as averages over three months prior to the intervention. Robust standard errors in parentheses. * $p < .1$; ** $p < .05$; *** $p < .01$.

Table IA.3: Treatment effects, restricted information shock sample

	Survey data		Transaction data			
	Δ *Inflation*	Δ *Depreciation*	*Durables*	*Trad. Dur.*	*Debt Repayment*	*Total*
	(1)	(2)	(3)	(4)	(5)	(6)
$\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right) \cdot T_{i,t}^{\pi}$	0.226***	0.025	2.076	1.816	4.048	–3.086
	(0.038)	(0.026)	(2.870)	(2.107)	(6.457)	(5.666)
$\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right) \cdot T_{i,t}^{d}$	–0.013	0.088***	–5.115*	–3.305	–20.484***	–13.522**
	(0.026)	(0.033)	(2.930)	(2.163)	(6.379)	(5.629)
Observations	2,722	2,722	2,722	2,722	2,722	2,722
R-squared	0.388	0.217	0.284	0.235	0.518	0.552
Outcome mean	–0.387	–0.286	256.937	177.027	1,919.213	950.618
Outcome median	0.000	0.000	116.551	70.982	1,151.871	625.957
Outcome st. dev.	2.691	2.734	340.504	250.997	2,042.564	905.062

The table replicates the reduced form treatment effects in a sample restricted to observations in the area of common support of the inflation and exchange rate shock distributions. Each column reports results from a separate OLS regression. The term $\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right)$ is the gap between the feedback about inflation rate shown to the individual and the individual's prior belief about the inflation rate. $T_{i,t}^{\pi}$ is an indicator variable that takes the value 1 if the feedback was shown to the subject, and 0 otherwise. The terms $\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right)$ and $T_{i,t}^{d}$ are the corresponding variables for the exchange rate. All regressions control for the gap between the signal and respondents' prior beliefs $\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right)$ and $\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right)$, respondent gender, age, age squared, number of dependents, household size, education, log income, as well as week and surveyor fixed effects. Regressions in columns (3) to (6) additionally control for pre-treatment spending in each category. Δ *Inflation* is the difference between posterior and prior beliefs about the inflation rate $\left(\pi_{i,t}^{post} - \pi_{i,t}^{prior}\right)$. Δ *Depreciation* is the difference between posterior and prior beliefs about the exchange rate $\left(d_{i,t}^{post} - d_{i,t}^{prior}\right)$. *Durables* are average monthly expenditures on durables. *Trad. Dur.* are average monthly expenditures on tradable durables. *Debt Repayment* is average monthly credit card debt repayment. *Total* is average monthly credit card expenditures in all categories. All spending outcomes are measured as averages over 3 months post treatment. Robust standard errors are reported in parentheses. * $p < .1$; ** $p < .05$; *** $p < .01$.

Table IA.4: Treatment effects by income

		Transaction data			
		Durables (1)	*Trad. Dur.* (2)	*Debt Repayment* (3)	*Total* (4)
Panel A: Below median income					
[A]	$\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right) \cdot T_{i,t}^{\pi}$	–0.454	2.216	0.333	–6.213
		(2.937)	(2.337)	(6.623)	(5.899)
[B]	$\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right) \cdot T_{i,t}^{d}$	–3.176	–2.760	–10.063	–3.054
		(3.110)	(2.474)	(7.017)	(6.247)
Observations		1,429	1,429	1,429	1,429
R-squared		0.236	0.198	0.501	0.557
Outcome mean		201.557	145.905	801.371	748.340
Outcome st. dev.		283.884	220.473	792.102	748.773
Panel B: Above median income					
[C]	$\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right) \cdot T_{i,t}^{\pi}$	2.953	0.674	5.503	–2.925
		(4.566)	(3.375)	(11.420)	(9.866)
[D]	$\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right) \cdot T_{i,t}^{d}$	–3.454	0.512	–20.775*	–12.762
		(4.303)	(3.181)	(10.755)	(9.296)
Observations		1,443	1,443	1,443	1,443
R-squared		0.292	0.256	0.501	0.521
Outcome mean		308.638	206.231	1,253.902	1,140.151
Outcome st. dev.		379.236	273.422	1,117.854	996.725
Test [A] = [C]		0.571	0.717	0.702	0.779
Test [B] = [D]		0.958	0.396	0.362	0.355

The table shows heterogeneous treatment effects by self-reported income at baseline. Within each panel, each column reports results from a separate OLS regression. The term $\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right)$ is the gap between the feedback about inflation rate shown to the individual and the individual's prior belief about the inflation rate. $T_{i,t}^{\pi}$ is an indicator variable that takes the value 1 if the feedback was shown to the subject, and 0 otherwise. The terms $\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right)$ and $T_{i,t}^{d}$ are the corresponding variables for the exchange rate. All regressions control for $\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right)$ and $\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right)$, gender, age, age squared, number of dependents, household size, education, log income, as well as week fixed effects, surveyor fixed effects, and pre-treatment spending in each category. *Durables* are average monthly expenditures on durables. *Trad. Dur.* are average monthly expenditures on tradable durables. *Debt Repayment* is average monthly credit card debt repayment. *Total* is total monthly spending in all categories. All spending outcomes are measured as averages over 3 months post treatment. Robust standard errors in parentheses. * $p < .1$; ** $p < .05$; *** $p < .01$.

Table IA.5: Effects of expectations on behavior, instrumental variables estimates

	Transaction data			
	Durables	*Trad. Dur.*	*Debt Repayment*	*Total*
	(1)	(2)	(3)	(4)
Δ *Inflation*	5.741	7.554	17.751	–15.324
tF adjusted st. dev.	(13.216)	(9.626)	(29.270)	(26.212)
tF 95% confidence interval	[–20.163, 31.644]	[–11.313, 26.421]	[–39.618, 75.119]	[–66.699, 36.051]
Kleibergen-Paap *F*-statistic	42.950	42.857	42.998	43.005
Δ *Exchange Rate*	–55.536	–22.783	–258.925	–113.051
tF adjusted st. dev.	(344.095)	(211.322)	(1280.919)	(740.463)
tF 95% confidence interval	[–729.950, 618.878]	[–436.967, 391.401]	[–2,769.480, 2,251.629]	[–1,564.331, 1,338.230]
Kleibergen-Paap F-statistic	4.138	4.162	4.062	4.105
Observations	2,872	2,872	2,872	2,872
Outcome mean	255.396	176.236	1028.896	945.336
Outcome st. dev.	339.425	250.29	995.555	903.541

The table reports instrumental variables estimates of the effect of expectations on spending and debt repayment with tF confidence intervals (Lee et al. 2022). Note that inflation and exhange rate treatment effects were estimated separately, as the Lee et al. (2022) procedure only allows for one endogenous regressor. The endogenous variables are Δ *Inflation*, which is the difference between the posterior and prior beliefs on the inflation rate (i.e., $\pi_{i,t}^{post} - \pi_{i,t}^{prior}$) and Δ *Exchange Rate*, which is the difference between the posterior and prior beliefs on the exchange rate (i.e., $d_{i,t}^{post} - d_{i,t}^{prior}$). The excluded instruments are $\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right) \cdot T_{i,t}^{\pi}$ and $\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right) \cdot T_{i,t}^{d}$. All regressions control for $\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right)$ and $\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right)$, respondent gender, age, age squared, number of dependents, household size, education, log income, as well as week fixed effects, surveyor fixed effects, and pretreatment spending in each spending category. Δ *Inflation* is the difference between the posterior and prior beliefs on the inflation rate (i.e., $\pi_{i,t}^{post} - \pi_{i,t}^{prior}$). Δ *Depreciation* is the difference between the posterior and prior beliefs on the exchange rate (i.e., $d_{i,t}^{post} - d_{i,t}^{prior}$).*Durables* are average monthly expenditures on durables. *Trad. Dur.* are average monthly expenditures on tradable durables. *Debt Repayment* is the average monthly amount of credit card debt repayment. *Total* is average monthly credit card spending in all categories. All spending outcomes are measured as averages over three months post treatment. Robust standard errors are reported in parentheses, 95% tF confidence intervals are in brackets. * $p < .1$; ** $p < .05$; *** $p < .01$.

Table IA.6: Treatment effects, salaried employees versus self-employed

		Transaction data			
		Durables (1)	*Trad. Dur.* (2)	*Debt Repayment* (3)	*Total* (4)
Panel A: Self-employed					
[A]	$\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right) \cdot T_{i,t}^{\pi}$	44.543*	–5.819	3.133	114.583*
		(22.161)	(15.423)	(70.565)	(62.450)
[B]	$\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right) \cdot T_{i,t}^{d}$	6.543	–13.373	–54.716	10.017
		(15.885)	(11.075)	(50.486)	(44.371)
Observations		70	70	70	70
R-squared		0.631	0.555	0.574	0.647
Outcome mean		244.749	137.592	916.375	850.612
Outcome st. dev.		360.084	228.497	1,051.595	1,025.152
Panel B: Salaried employees					
[C]	$\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right) \cdot T_{i,t}^{\pi}$	0.509	2.549	–15.457	6.198
		(9.229)	(7.233)	(24.406)	(19.925)
[D]	$\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right) \cdot T_{i,t}^{d}$	–6.348	2.497	–57.474**	–16.249
		(10.174)	(7.973)	(26.968)	(21.957)
Observations		275	275	275	275
R-squared		0.446	0.374	0.574	0.627
Outcome mean		323.016	213.921	1,290.349	1,163.354
Outcome st. dev.		406.184	299.484	1,188.637	1,067.173
Test [A] = [C]		0.025	0.586	0.737	0.023
Test [B] = [D]		0.400	0.192	0.954	0.563

The table shows heterogeneous treatment effects by employment at baseline. Within each panel, each column reports results from a separate OLS regression. The term $\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right)$ is the gap between the feedback about inflation rate shown to the individual and the individual's prior belief about the inflation rate. $T_{i,t}^{\pi}$ is an indicator variable that takes the value 1 if the feedback was shown to the subject, and 0 otherwise. The terms $\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right)$ and $T_{i,t}^{d}$ are the corresponding variables for the exchange rate. All regressions control for $\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right)$ and $\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right)$, gender, age, age squared, number of dependents, household size, education, log income, as well as week fixed effects, surveyor fixed effects, and pre-treatment spending in each category. *Durables* are average monthly expenditures on durables. *Trad. Dur.* are average monthly expenditures on tradable durables. *Debt Repayment* is average monthly credit card debt repayment. *Total* is total monthly spending in all categories. All spending outcomes are measured as averages over 3 months post treatment. Robust standard errors in parentheses. * $p < .1$; ** $p < .05$; *** $p < .01$.

Table IA.7: Treatment effects, salaried employees versus transportation workers

		Transaction data			
		Durables (1)	*Trad. Dur.* (2)	*Debt Repayment* (3)	*Total* (4)
Panel A: Self-employed					
[A]	$\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right) \cdot T_{i,t}^{\pi}$	19.448**	15.396**	22.422	20.173
		(8.425)	(6.539)	(19.634)	(14.830)
[B]	$\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right) \cdot T_{i,t}^{d}$	–5.175	1.649	–15.148	–20.021
		(9.091)	(7.070)	(21.152)	(15.963)
Observations		310	310	310	310
R-squared		0.412	0.340	0.577	0.702
Outcome mean		364.624	251.925	1,433.359	1,373.047
Outcome st. dev.		387.678	283.819	1,064.407	957.924
Panel B: Salaried employees					
[C]	$\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right) \cdot T_{i,t}^{\pi}$	–1.137	–0.040	0.791	–7.706
		(2.733)	(2.082)	(6.689)	(5.914)
[D]	$\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right) \cdot T_{i,t}^{d}$	–3.039	–1.561	–15.770**	–5.981
		(2.719)	(2.071)	(6.654)	(5.883)
Observations		2,562	2,562	2,562	2,562
R-squared		0.270	0.225	0.577	0.521
Outcome mean		242.190	167.085	979.995	893.624
Outcome st. dev.		330.767	244.405	975.827	883.006
Test [A] = [C]		0.030	0.015	0.264	0.041
Test [B] = [D]		0.828	0.657	0.977	0.419

The table shows heterogeneous treatment effects by employment at baseline. Within each panel, each column reports results from a separate OLS regression. The term $\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right)$ is the gap between the feedback about inflation rate shown to the individual and the individual's prior belief about the inflation rate. $T_{i,t}^{\pi}$ is an indicator variable that takes the value 1 if the feedback was shown to the subject, and 0 otherwise. The terms $\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right)$ and $T_{i,t}^{d}$ are the corresponding variables for the exchange rate. All regressions control for $\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right)$ and $\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right)$, gender, age, age squared, number of dependents, household size, education, log income, as well as week fixed effects, surveyor fixed effects, and pre-treatment spending in each category. *Durables* are average monthly expenditures on durables. *Trad. Dur.* are average monthly expenditures on tradable durables. *Debt Repayment* is average monthly credit card debt repayment. *Total* is total monthly spending in all categories. All spending outcomes are measured as averages over 3 months post treatment. Robust standard errors in parentheses. * $p < .1$; ** $p < .05$; *** $p < .01$.

Table IA.8: Treatment effects by foreign currency transactions at baseline

	Transaction data		
	Durables (1)	*Trad. Dur.* (2)	*Total* (3)
Panel A: Any foreign transactions			
[A] $\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right) \cdot T_{i,t}^{d}$	–5.727*	–2.350	–13.317*
	(3.264)	(2.479)	(6.959)
Observations	2,036	2,036	2,036
R-squared	0.293	0.246	0.541
Outcome mean	291.387	200.323	1,077.669
Panel B: No foreign transactions			
[B] $\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right) \cdot T_{i,t}^{d}$	1.502	0.592	3.768
	(4.214)	(3.260)	(8.669)
Observations	836	836	836
R-squared	0.194	0.154	0.477
Outcome mean	167.656	117.518	622.736
Test [A] = [B]	0.174	0.460	0.092

The table shows heterogeneous treatment effects by foreign currency spending at baseline. Within each panel, each column reports results from a separate OLS regression. The term $\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right)$ is the gap between the feedback about the exchange rate shown to the individual and the individual's prior belief about the exchange rate. $T_{i,t}^{d}$ is an indicator variable that takes the value 1 if the feedback was shown to the subject, and 0 otherwise. All regressions control for $\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right)$, gender, age, age squared, number of dependents, household size, education, log income, as well as week fixed effects, surveyor fixed effects, and pre-treatment spending in each category. *Durables* are average monthly expenditures on durables. *Trad. Dur.* are average monthly expenditures on tradable durables. *Total* is total monthly spending in all categories. All spending outcomes are measured as averages over 3 months post treatment. Robust standard errors in parentheses. * $p < .1$; ** $p < .05$; *** $p < .01$.

Table IA.9: Effects of information on expectations and behavior by size of purchases, reduced form estimates

	Durables			*Tradable Durables*			*Total*		
	p25	p75	Diff	p25	p75	Diff	p25	p75	Diff
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Δ *Inflation*	–0.002	0.007	0.009	–0.009	0.010	0.018	–0.001	–0.007	–0.008
	(0.006)	(0.009)	(0.010)	(0.007)	(0.009)	(0.011)	(0.006)	(0.006)	(0.009)
Δ *Exchange Rate*	–0.007	–0.011	–0.005	–0.004	–0.006	–0.003	0.003	–0.011	–0.010
	(0.001)	(0.003)	(0.003)	(0.004)	(0.003)	(0.005)	(0.002)	(0.002)	(0.003)
Observations	2,872	2,872		2,872	2,872		2,872	2,872	
R-squared	0.020	0.211	0.102	0.083	0.167	0.110	0.028	0.512	0.214
Outcome mean	0.000	0.000		0.000	0.000		0.000	0.001	
Outcome st. dev.	1.000	1.000		1.000	1.000		1.000	1.000	

The table reports reduced form treatment effects on spending by size of purchases. Each column reports results from a separate OLS regression. $\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right)$ is the gap between the feedback about inflation and the respondent's prior belief about the inflation rate. $T_{i,t}^{\pi}$ is an indicator variable that takes the value 1 if the feedback was shown to the subject, and 0 otherwise. $\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right)$ and $T_{i,t}^{d}$ are the corresponding variables for the exchange rate. All regressions control for $\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right)$ and $\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right)$, gender, age, age squared, number of dependents, household size, education, log income, as well as week fixed effects, surveyor fixed effects, and pre-treatment spending in each spending category. *Durables* are average monthly expenditures on durables. *Tradable Durables* are average monthly expenditures on tradable durables. *Total* is average monthly spending in all categories. *p25* and *p75* are monthly average expenditures in purchases whose amount correspond to the bottom and top quartiles of purchases withing each individual's spending in that category. All dependent variables are standardized for comparability. Robust standard errors in parentheses. * $p < .1$; ** $p < .05$; *** $p < .01$.

Table IA.10: Effects of information on expectations and behavior by size of purchases, reduced form estimates

	Durables			*Tradable Durables*			*Total*		
	Bottom 3 cat.	Top 3 cat.	Diff	Bottom 3 cat.	Top 3 cat.	Diff	Bottom 3 cat.	Top 3 cat.	Diff
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Δ *Inflation*	–0.012	–0.001	0.011	–0.012	0.005	0.016	0.002	–0.001	–0.003
	(0.008)	(0.010)	(0.012)	(0.008)	(0.010)	(0.012)	(0.007)	(0.010)	(0.011)
Δ *Exchange Rate*	0.005	0.006	0.003	0.005	0.005	0.001	–0.006	0.006	0.007
	(0.004)	(0.003)	(0.004)	(0.004)	(0.003)	(0.004)	(0.002)	(0.003)	(0.003)
Observations	2,872	2,872		2,872	2,872		2,872	2,872	
R-squared	0.041	0.082	0.038	0.041	0.058	0.034	0.449	0.082	0.160
Outcome mean	0.000	0.000		0.000	0.000		0.000	0.000	
Outcome st. dev.	1.000	1.000		1.000	1.000		1.000	1.000	

The table reports reduced form treatment effects on spending by size of purchases. Each column reports results from a separate OLS regression. $\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right)$ is the gap between the feedback about inflation and the respondent's prior belief about the inflation rate. $T_{i,t}^{\pi}$ is an indicator variable that takes the value 1 if the feedback was shown to the subject, and 0 otherwise. $\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right)$ and $T_{i,t}^{d}$ are the corresponding variables for the exchange rate. All regressions control for $\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right)$ and $\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right)$, gender, age, age squared, number of dependents, household size, education, log income, as well as week fixed effects, surveyor fixed effects, and pre-treatment spending in each spending category. *Durables* are average monthly expenditures on durables. *Tradable Durables* are average monthly expenditures on tradable durables. *Total* is average monthly spending in all categories. *Bottom 3 Cat.* and *Top 3 Cat.* are monthly average expenditures in the categories with the lowest and highest median price of individual purchases, respectively. The categories with the lowest median price are *Direct Marketing*, *Groceries and Books* and *Stationery*. The categories with the highest median price are *Automotive*, *Jewellery and Watches* and *Insurance*. All spending outcomes are measured as averages over three months post treatment and standardized for comparability. Robust standard errors in parentheses. * $p < .1$; ** $p < .05$; *** $p < .01$.

Table IA.11: Treatment effects, economic outlook

	Negative economic outlook	
	National economy	*Personal economic situation*
	(1)	(2)
$\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right) \cdot T_{i,t}^{\pi}$	0.007*	0.004
	(0.004)	(0.003)
$\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right) \cdot T_{i,t}^{d}$	0.003	–0.005*
	(0.004)	(0.003)
Observations	2,872	2,872
R-squared	0.067	0.040
Outcome mean	0.187	0.101
Outcome st. dev.	0.390	0.302

The table reports reduced form treatment effects of the information provision experiment on respondents' self-reported economic outlook. The dependent variable in column (1) is an indicator equal to 1 if a respondent states that they expect the Malaysian economy to be doing worse over the next 12 months than it is today, and 0 otherwise. The dependent variable in column (2) is an indicator equal to 1 if a respondent expects their own economic situation to get worse over the next 12 months than it is today, and 0 otherwise. Δ *Inflation* is the difference between the posterior and prior beliefs about the inflation rate. Δ *Exchange Rate* is the difference between the posterior and prior beliefs about the exchange rate. All regressions control for $\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right)$ and $\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right)$, respondent gender, age, age squared, number of dependents, household size, education, log income, as well as week and surveyor fixed effects. Robust standard errors in parentheses. * $p < .1$; ** $p < .05$; *** $p < .01$.

Table IA.12: Reduced form treatment effects, one-month time horizon

	Survey data		Transaction data			
	Δ *Inflation*	Δ *Depreciation*	*Durables*	*Trad. Dur.*	*Debt Repayment*	*Total*
	(1)	(2)	(3)	(4)	(5)	(6)
$\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right) \cdot T_{i,t}^{\pi}$	0.235***	0.028	–4.093	–0.412	–2.617	-11.389
	(0.037)	(0.026)	(3.227)	(2.467)	(8.706)	(7.148)
$\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right) \cdot T_{i,t}^{d}$	–0.029	0.066**	–3.667	–1.659	0.311	–2.509
	(0.023)	(0.031)	(3.220)	(2.397)	(8.670)	(6.579)
Observations	2,872	2,872	2,870	2,870	2,872	2,870
R-squared	0.393	0.227	0.170	0.143	0.311	0.401
Outcome mean	–0.369	–0.212	253.396	171.667	1,022.339	936.801
Outcome st. dev.	2.695	2.837	397.226	295.006	1,167.819	992.141

The table reports reduced-form treatment effects of the information provision experiment estimated one month after the intervention. Column (1) corresponds to equation (4), column (2) to equation (5), and columns (3) through (6) to equation (6). The term $\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right)$ is the gap between the feedback about inflation rate shown to the individual and the individual's prior belief about the inflation rate. $T_{i,t}^{\pi}$ is an indicator variable that takes the value 1 if the feedback was shown to the subject, and 0 otherwise. The terms $\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right)$ and $T_{i,t}^{d}$ are the corresponding variables for the exchange rate. All regressions control for the gap between the signal and respondents' prior beliefs $\left(\pi_{i,t}^{signal} - \pi_{i,t}^{prior}\right)$ and $\left(d_{i,t}^{signal} - d_{i,t}^{prior}\right)$, respondent gender, age, age squared, number of dependents, household size, education, log income, as well as week and surveyor fixed effects. Regressions in columns (3) to (6) additionally control for pre-treatment spending in each category. Δ *Inflation* is the difference between posterior and prior beliefs about the inflation rate $\left(\pi_{i,t}^{post} - \pi_{i,t}^{prior}\right)$. Δ *Depreciation* is the difference between posterior and prior beliefs about the exchange rate $\left(d_{i,t}^{post} - d_{i,t}^{prior}\right)$. *Durables* are average monthly expenditures on durables. *Trad. Dur.* are average monthly expenditures on tradable durables. *Debt Repayment* is average monthly credit card debt repayment. *Total* is average monthly credit card expenditures in all categories. All spending outcomes are measured as averages over 3 months post treatment. Robust standard errors in parentheses. * $p < .1$; ** $p < .05$; *** $p < .01$.

Table IA.13: Demand for inflation-indexed assets, heterogeneity analysis

Dependent variable:	Demand for inflation protected asset=1							
Scenario:	Inflation							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$\Delta Belief$	0.015***	0.020***	-0.010	0.019***	0.019***	-0.006	0.008	0.006
	(0.004)	(0.006)	(0.009)	(0.006)	(0.005)	(0.021)	(0.007)	(0.011)
Income below median		-0.157**						
		(0.066)						
$\Delta Belief \cdot$ Income below median		-0.011						
		(0.009)						
Literacy above median			0.058					
			(0.092)					
$\Delta Belief \cdot$ Literacy above median			0.048***					
			(0.012)					
Single				0.001				
				(0.067)				
$\Delta Belief \cdot$ Single				-0.010				
				(0.009)				
Less than college					-0.034			
					(0.088)			
$\Delta Belief \cdot$ Less than college					-0.021*			
					(0.011)			
Has bank account						0.395*		
						(0.223)		
$\Delta Belief \cdot$ Has bank account						0.022		
						(0.021)		
Has credit card							0.093	
							(0.067)	
$\Delta Belief \cdot$ Has credit card							0.012	
							(0.009)	
Self-employed								0.117
								(0.117)
$\Delta Belief \cdot$ Self-employed								-0.003
								(0.015)
Working for someone								0.092
								(0.090)
$\Delta Belief \cdot$ Working for someone								0.014
								(0.013)
Observations	789	789	397	789	789	789	789	789
R-squared	0.047	0.056	0.079	0.049	0.051	0.053	0.052	0.056

The table reports heterogeneous treatment effects by respondent characteristics for the inflation scenario treatment in the survey experiment. Δ Belief$_i$ = $\left(\pi_i^{scenario} - \pi_i^{prior}\right)$ is the gap between the hypothetical inflation rate shown to the respondent and the respondent's prior belief. All regressions control for the hypothetical baseline scenario and its interaction with the characteristic tested in each column. Robust standard errors in parentheses. * $p < .1$; ** $p < .05$; *** $p < .01$.

Table IA.14: Demand for inflation-indexed assets, heterogeneity analysis

Dependent variable:	Demand for inflation protected asset=1							
Scenario:	Depreciation							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$\Delta Belief$	0.020***	0.000	0.022***	0.013**	0.021***	0.025	0.021***	0.035***
	(0.004)	(0.009)	(0.006)	(0.006)	(0.005)	(0.021)	(0.006)	(0.010)
Literacy above median		-0.011						
		(0.089)						
$\Delta Belief \cdot$ Literacy above median		0.028**						
		(0.012)						
Income below median			0.003					
			(0.064)					
$\Delta Belief \cdot$ Income below median			-0.006					
			(0.009)					
Single				0.042				
				(0.064)				
$\Delta Belief \cdot$ Single				0.017**				
				(0.009)				
Less than college					0.006			
					(0.083)			
$\Delta Belief \cdot$ Less than college					-0.005			
					(0.010)			
Has bank account						-0.384*		
						(0.200)		
$\Delta Belief \cdot$ Has bank account						-0.005		
						(0.021)		
Has credit card							-0.024	
							(0.064)	
$\Delta Belief \cdot$ Has credit card							-0.002	
							(0.009)	
Self-employed								-0.112
								(0.109)
$\Delta Belief \cdot$ Self-employed								-0.020
								(0.014)
Working for someone								0.086
								(0.081)
$\Delta Belief \cdot$ Working for someone								-0.017
								(0.011)
Observations	789	397	789	789	789	789	789	789
R-squared	0.107	0.112	0.110	0.118	0.108	0.115	0.109	0.118

The table reports heterogeneous treatment effects by respondent characteristics for the exchange rate scenario treatment in the survey experiment. Δ Belief$_i = \left(d_i^{scenario} - d_i^{prior}\right)$ is the gap between the hypothetical exchange rate depreciation scenario shown to the respondent and the respondent's prior belief. All regressions control for the hypothetical baseline scenario and its interaction with the characteristic tested in each column. * $p < .1$; ** $p < .05$; *** $p < .01$.

Table IA.15: Survey experiment, demand for inflation-indexed securities, fixed income treatment

Scenario:	Inflation				Depreciation			
	Dur.	*Trad. Dur.*	*Debt Rep.*	*Total*	*Dur.*	*Trad. Dur.*	*Debt Rep.*	*Total*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$\Delta Belief$	-0.019***	-0.021***	0.001	0.003	-0.025***	-0.027***	0.000	0.002
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
$\Delta Belief \cdot T_i^{FI}$	0.002	0.000	0.002	0.004	0.003	0.005	0.005	0.006
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Observations	3,123	3,123	3,123	3,123	3,123	3,123	3,123	3,123
R-squared	0.187	0.205	0.156	0.198	0.235	0.204	0.132	0.159
Outcome mean	0.065	0.076	-0.088	-0.185	-0.063	-0.144	0.188	0.197
Outcome st. dev.	0.742	0.773	0.747	0.750	0.758	0.760	0.741	0.775

The table reports reduced form treatment effects on demand for inflation indexed securities in the extension of the mental model survey experiment where respondents were explicitly told to assume that their nominal income would remain constant. Each column corresponds to a separate OLS regression. Columns (1) and (2) report results for hypothetical inflation shocks and columns (3) and (4) report results for hypothetical exchange rate depreciation shocks. For the inflation scenario, Δ Belief$_i$ = $\left(\pi_i^{scenario} - \pi_i^{prior}\right)$ is the gap between the hypothetical inflation rate shown to the respondent and the respondent's prior belief. For the depreciation scenario, Δ Belief$_i$ $= \left(d_i^{scenario} - d_i^{prior}\right)$ is the analogous gap for the depreciation rate. $FinLit_i$ is an indicator variable that takes the value 1 for respondents with an above-median financial literacy score The dependent variable in all regressions is an indicator equal to 1 if the respondent states that they would like to purchase the inflation indexed asset. All regressions additionally control for the financial literacy indicator $FinLit_i$ and the hypothetical baseline scenario. Robust standard errors in parentheses. $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

E Survey Instrument

Hello! My name is [surveyor name]. I am working for researchers at the University of California, Los Angeles, currently working in Malaysia. We are conducting a short survey to know Malaysians overall economical situation. Do you have five minutes to respond to the survey?

- Yes
- No

[If the answer to the previous question was "yes":] Great, thank you so much. By the way, if you'd prefer to do the survey in Alternative Language, let me know. I will start asking a few questions about your background.

What is your current employment situation?

- Full-time employee
- Part-time employee
- Self-employed
- Not working

What is your highest education level?

- No school
- High school
- College or some college
- After bachelor degree

Are you married or single?

- Married
- Single
- Divorced

Do you have any children or other dependents that you look after?

- Yes
- No

[If the answer to the previous question was "yes":] How many?

- 1
- 2
- 3
- 4
- 5 or more

Regarding business conditions in the country as a whole, do you think that during the next 12 months the Malaysian economy will be better off, about the same, or worse off?

- Better off
- About the same
- Worse off

Now we want to ask you about the annual inflation rate, which is a measure of how prices in Malaysia change in general. In your opinion, what will be the inflation rate over the next 12 months?

- [ ] %

Now we want to ask you about the exchange rate. As of April 2019, 1 U.S. Dollar is worth around 4.05 Ringgit Malaysia. In your opinion, what will the exchange rate be 12 months from now, in April 2020?

- [ ] Ringgit Malaysia

In this stage, we randomly select respondents to receive some feedback about the previous questions. [Subjects are randomly assigned to one of the following three treatments.]

Treatment Exchange Rate: **The consensus among economic experts both from the government and the private sectors is that 1 U.S. Dollar will be worth 4.10 Ringgit Malaysia one year from now.**

Treatment Inflation: **The consensus among economic experts both from the government and the private sectors is that the inflation in Malaysia will be 2.3% over the next 12 months.**

Treatment Both: **The consensus among economic experts both from the government and the private sectors is that the inflation in Malaysia will be 2.3% over the next 12 months and 1 U.S. Dollar will be worth 4.10 Ringgit Malaysia one year from now.**

What will the inflation rate be over the next 12 months?

- [ ] %

What will be the exchange rate from U.S. Dollar to Ringgit 12 months from now, in April 2020?

- [ ] Ringgit Malaysia

Regarding business conditions in the country as a whole, do you think that during the next 12 months the Malaysian economy will be better off, about the same, or worse off?

- Better off
- The same
- Worse off

Looking forward, would you say that you and your family living with you will be better off or worse off financially than you are now?

- Better off
- About the same
- Worse off

Do you expect your credit card spending to go up, stay the same, or go down during the next 3 months?

- Go up
- Stay the same
- Go down

Do you expect that your spending on groceries to go up, stay the same, or go down during the next 3 months?

- Go up
- Stay the same
- Go down

Do you expect your total spending to go up, stay the same, or go down during the next 3 months?

- Go up
- Stay the same
- Go down

Do you think now is a good time, a bad time, or neither a good nor a bad time to buy household items, such as furniture or a refrigerator? More examples: television, stove or others

- Yes, it's a good time
- It's neither a good nor a bad time
- No, it's a bad time

Do you think now is a good time, a bad time, or neither a good nor a bad time to buy electronic items, such as a computer, TV, phone, washing machine and so on?

- Yes, it's a good time
- It's neither a good nor a bad time
- No, it's a bad time

Do you think now is a good time, a bad time, or neither good nor a bad time to buy a vehicle, car or motorbike?

- Yes, it's a good time
- It's neither a good nor a bad time
- No, it's a bad time

Do you think now is a good time, a bad time, or neither good or bad time to buy big items on an installment basis? [If asked, provide the following examples: installments such as AEON Credit, Courts Mammoth; items such as a car, motorbike, television set, washing machine and so on.]

- Yes, it's a good time
- It's neither a good nor a bad time
- No, it's a bad time

F Complementary Survey Experiment, Questionnaire

Hello. We are conducting a survey about the economic outlook for Malaysia. This survey consists of 42 questions and takes approximately 10 minutes. The questions in this survey have no right or wrong answers — we are interested in your views and opinions. Your responses are 100% confidential.At the end of the survey you will have a box where you can let us know if there are any problems with the survey.

- YES, I would like to participate in this survey
- NO, I don't want to participate in this survey

Which of these words is the most associated with the word "paint"?

- draw
- run
- sports
- loud

Which of these words is the most associated with the word "cucumber"?

- video
- trigger
- vegetable
- heel

Recent research on decision making shows that choices are affected by the context in which they are made. Differences in how people feel, in their previous knowledge and experience, and in their environment can influence the choices they make. To help us understand how people make decisions, we are interested in information about you, specifically whether you actually take the time to read the instructions; if you don't, some results may fail to tell us very much about decision making in the real world. To help us confirm that you have read these instructions, please select the "none of the above" option below. Thank you very much.

- Interested
- ...
- None of the above

To get a general picture of the people answering this survey, we would like to know a few things about your background. What is your current employment situation?

- Working full time for someone
- Working part time for someone
- Self-employed
- Not working

Do you have any of the following types of financial products or accounts?

- Bank account — Yes/No

- Debit card — Yes/No
- Charge (prepaid) card — Yes/No
- Credit card — Yes/No

What is your approximate monthly income?

- Less than MYR 1000
- Between MYR 1000 and 2000
- Between MYR 2000 and 3000
- Between MYR 3000 and 5000
- More than MYR 5000

What is your highest education level?

- No school
- High school
- College or some college
- After bachelor degree

Are you married or single?

- Married
- Single
- Divorced

Do you have any children or other dependents that you look after?

- Yes
- No
- Display This Question:
- If Do you have any children or other dependents that you look after? = Yes

[If answered 'Yes' to previous question]

How many?

- 1
- 2
- 3
- 4
- 5 or more

Now we want to ask you about the exchange rate. As of [Current month, year], 1 U.S. Dollar is worth around [Current exchange rate] Ringgit Malaysia. In your opinion, what will the exchange rate be 12 months from now, in [Current month, next year]?

- 3.70 RM
- ...
- 4.70 RM

Next, we will give you a few hypothetical scenarios, and we want to ask about your expectations and spending plans in each scenario.

In this section we sequentially ask about three scenarios
[Here is the first scenario we want you to consider:/ Now, we give you a second, different scenario: / Now, we give you a third, different scenario:]

Prior: suppose the inflation rate will be [Prior inflation] and the exchange rate will go from [Current forex] RM to [Prior forex] RM per 1 U.S. Dollar (a X% depreciation) over the next 12 months.

Inflation: Suppose the inflation rate will be [Prior inflation + random inflation change] over the next 12 months.

Forex: Suppose the exchange rate will go from [Current forex] RM to [Prior forex · (1 + random forex change)] RM per 1 U.S. Dollar (a X% depreciation) over the next 12 months.
Each random change is sampled from $\{-10, -3, 3, 10\}$ *percentage points.*

The fixed income treatment adds "Assume that, other than this, business conditions, interest rates, and your personal financial situation remain the same." to each scenario.

Here is the first scenario we want you to consider: **[Present scenario]**

Imagine that you are offered to choose between two savings accounts. The first pays an interest rate of 5% per year. The second pays 1% per year after correcting for the inflation rate. Which account would you choose?

- First account: 5% per year

- Second account: 1% per year + inflation
- Don't know

[Present scenario]
In this scenario, do you expect your credit card spending to go up, stay the same, or go down during the next 3 months?

- Go up
- Stay the same
- Go down

[Present scenario]
In this scenario, do you expect your spending on groceries to go up, stay the same, or go down during the next 3 months?

- Go up
- Stay the same
- Go down

[Present scenario] In this scenario, do you expect your total spending to go up, stay the same, or go down during the next 3 months?

- Go up
- Stay the same
- Go down

[Present scenario] In this scenario, do you think it would be a good time, a bad time, or neither a good nor a bad time to buy household items, such as furniture, television, stove, or a refrigerator?

- Yes, it would be a good time
- It'd be neither a good nor a bad time
- No, it would be a bad time

[Present scenario] In this scenario, do you think it would be a good time, a bad time, or neither a good nor a bad time to buy electronic items, such as a computer, handphone, and so on?

- Yes, it would be a good time
- It'd be neither a good nor a bad time

- No, it would be a bad time

[Present scenario]

In this scenario, do you think it would be a good time, a bad time, or neither good nor a bad time to buy a vehicle, car, or motorbike?

- Yes, it would be a good time
- It'd be neither a good nor a bad time
- No, it would be a bad time

[Present scenario]

In this scenario, do you think it would be a good time, a bad time, or neither good or bad time to buy big items on an installment basis?

- Yes, it would be a good time
- It'd be neither a good nor a bad time
- No, it would be a bad time

[Present scenario]

In this scenario, would you say that you and your family living with you will be better off or worse off financially than you are now?

- Better off
- About the same
- Worse off

Imagine that you are offered to choose between two savings accounts. The first pays an interest rate of 5% per year. The second pays 1% per year after correcting for the inflation rate. You expect that the inflation rate is going to be 7%.Which account would you choose?

- First account: 5% per year
- Second account: 1% per year + inflation
- Don't know

Suppose that the inflation rate increases from [Prior inflation belief] to [Prior inflation belief + 10 pp.]. Assume that, other than this, business conditions, interest rates, and your personal financial situation remain the same. Which of the following is the best thing to do in this situation?

- It is best to spend more with a credit card
- It is best to spend less with a credit card
- I don't know if it is better to spend more or less with a credit card

Suppose that you expect the value of the Ringgit to decrease from [Prior forex belief] US dollars per 1 RM to [Prior forex belief · 1.1] US dollars per 1 RM one year from now and you are planning to buy some electronics. Assume that, other than this, business conditions, interest rates, and your personal financial situation remain the same. Which of the following is the best thing to do in this situation?

- It is best to buy electronics now
- It is best to buy electronics later
- I don't know if it's better to buy electronics now or later in this scenario.

Suppose that you expect the value of the Ringgit to decrease from [Prior forex belief] US dollars per 1 RM to [Prior forex belief · 1.1] US dollars per 1 RM and you are planning to buy a car or a motorbike. Assume that, other than this, business conditions, interest rates, and your personal financial situation remain the same. Which of the following is the best thing to do in this situation?

- It is best to buy a car or a motorbike now
- It is best to buy a car or a motorbike later
- I don't know if it's better to buy a car or a motorbike now or later in this scenario

Suppose you had $100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?

- More than $102
- Exactly $102
- Less than $102
- Do not know

Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account?

- More than today
- Exactly the same
- Less than today

- Do not know

Please tell me whether this statement is true or false. "Buying a single company's stock usually provides a safer return than a mutual fund that invests in the stocks of multiple companies."

- True
- False
- Do not know

How would you rate your understanding of the questions included in this survey?

- I understood all the questions
- There were a few questions I did not understand
- There were several questions I did not understand
- There were many questions I did not understand

Thank you for your participation in this survey!

References

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