

INFLATION EXPECTATIONS AND FIRMS' DECISIONS IN HIGH INFLATION: EVIDENCE FROM A RANDOMIZED CONTROL TRIAL

Okan Akarsu
CBRT

Emrehan Aktuğ
Sabancı University

Huzeyfe Torun
CBRT

November 7, 2025

Bank of Albania

19th South-Eastern European Economic Research Workshop



Outline

- 1 Introduction and Research Questions
- 2 Methodology and Empirical Setting
- 3 Causal Impact on Firms' Decisions and Expectations
 - Firms' Wage, Price and Economic Outlook Expectations
 - Borrowing Behavior
 - Real Outcome (employment, sales, inventory)
- 4 Conclusion

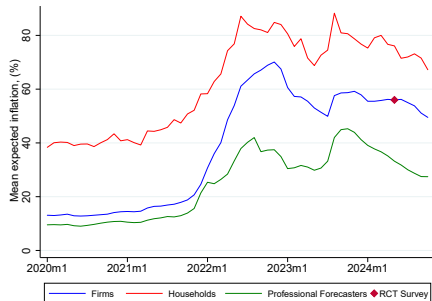
Outline

- 1 Introduction and Research Questions
- 2 Methodology and Empirical Setting
- 3 Causal Impact on Firms' Decisions and Expectations
 - Firms' Wage, Price and Economic Outlook Expectations
 - Borrowing Behavior
 - Real Outcome (employment, sales, inventory)
- 4 Conclusion

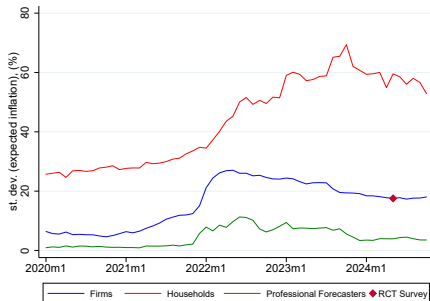
Inflation expectations and (in)attention?

- Expectations: part of decision-making process of firms
 - ▶ Phillips Curve, Euler Equation, Tobin's Q, Asset Pricing, Taylor rule
 - ▶ Empirically challenging to identify the **causal impact**
- Firms deviate from full-information rational expectations
- Yet, evidence from **high-inflation** environments is scarce
- **1st randomized information experiment (RCT)** in high-inflation
 - ▶ Annual inflation was around 75%
- Information treatments conducted immediately after the May 2024 wave of the CBRT's regular monthly firm expectations survey
- Examine **causal impacts of expectations** on firm decisions
 - ▶ Post-treatment behavior is tracked using **administrative data**

Expectations in Turkey



(a) Mean Expected Inflation



(b) Disagreement in Expected Inflation

Figure: One-Year-Ahead Inflation Expectations of HHs, Firms, and Professionals

Research Questions

- Are information treatments effective in high-inflation?
- **Pass-through rates** to firms' price and wage expectations?
- Effects on **borrowing behavior and FX market transactions**?
- Do heightened inflation expectations affect **real outcomes**?
 - ▶ employment, sales, and purchasing activity
- **Causal relationship** between inflation expectations and pessimism?

Shocks to Inflation Expectations

New Keynesian Phillips curve:

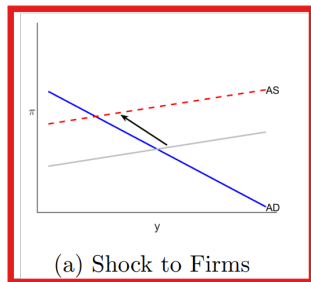
$$\pi_t = \beta \pi_{f,t}^{e,1} + \kappa y_t$$

Euler equation:

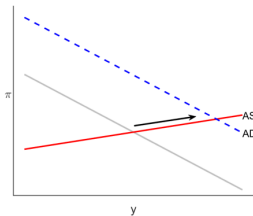
$$i_t = \mathbb{E}_t[\gamma(y_{t+1} - y_t)] + \pi_{hh,t}^{e,1}$$

Modified Taylor rule:

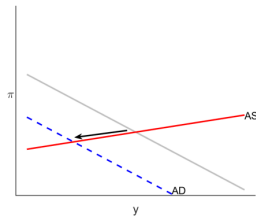
$$i_t = \phi_y y_t + \phi_\pi \pi_t + \phi_e \pi_{cb,t}^{e,1}$$



(a) Shock to Firms



(b) Shock to Households



(c) Shock to Central Bank

Figure: Response to Expectation Shocks, Adams and Barrett (2024)

- *Reactions differ depending on whose expectations are being shocked*

Main Findings (Preview)

Higher firm inflation expectations lead to:

- ① **Fact 1: Higher wage, cost, and price expectations**
 - ▶ Pass-through rates to wage and price expectations are **60%**.

Main Findings (Preview)

Higher firm inflation expectations lead to:

- ① **Fact 1:** Higher wage, cost, and price expectations
- ② **Fact 2: Increased pessimism about aggregate and firm outlook**
 - ▶ Supply-sided view of the economy
 - ▶ Higher inflation \Rightarrow lower output expectation

Main Findings (Preview)

Higher firm inflation expectations lead to:

- ① **Fact 1:** Higher wage, cost, and price expectations
 - ② **Fact 2:** Increased pessimism about aggregate and firm outlook
-
- ③ **Fact 3: Increased credit usage (with compositional shift)**
 - ▶ More long-term credit (10 pp \uparrow in expect \Rightarrow 3 percent more use)
 - ▶ Less short-term credit (10 pp \uparrow in expect \Rightarrow 1 percent less use)

Main Findings (Preview)

Higher firm inflation expectations lead to:

- ① **Fact 1:** Higher wage, cost, and price expectations
- ② **Fact 2:** Increased pessimism about aggregate and firm outlook

- ③ **Fact 3:** Increased credit usage (with compositional shift)
- ④ **Fact 4: More borrowing in TL, less in foreign currency**
 - ▶ Liability-side **dedollarisation**

Main Findings (Preview)

Higher firm inflation expectations lead to:

- ① **Fact 1:** Higher wage, cost, and price expectations
- ② **Fact 2:** Increased pessimism about aggregate and firm outlook

- ③ **Fact 3:** Increased credit usage (with compositional shift)
- ④ **Fact 4:** More borrowing in TL, less in foreign currency
- ⑤ **Fact 5: Increased foreign currency holdings (asset dollarization)**
 - ▶ Inflation hedging against depreciation, with more FC holding

Main Findings (Preview)

Higher firm inflation expectations lead to:

- ➊ **Fact 1:** Higher wage, cost, and price expectations
- ➋ **Fact 2:** Increased pessimism about aggregate and firm outlook

- ➌ **Fact 3:** Increased credit usage (with compositional shift)
- ➍ **Fact 4:** More borrowing in TL, less in foreign currency
- ➎ **Fact 5:** Increased foreign currency holdings (asset dollarization)
- ➏ **Fact 6: Lower growth in sales and employment, higher purchases**
 - ▶ 10 pp \uparrow in expectation \Rightarrow 0.5 percent **decline** in employment
 - ▶ 10 pp \uparrow in expectation \Rightarrow 0.2 percent **decline** in sales
 - ▶ 10 pp \uparrow in expectation \Rightarrow 0.2 percent **increase** in purchases

Outline

- 1 Introduction and Research Questions
- 2 Methodology and Empirical Setting
- 3 Causal Impact on Firms' Decisions and Expectations
 - Firms' Wage, Price and Economic Outlook Expectations
 - Borrowing Behavior
 - Real Outcome (employment, sales, inventory)
- 4 Conclusion

Methodology: Randomized Controlled Trial

- **Sample:** Over 1,200 firms surveyed in May 2024
- High inflation context:
 - ▶ Annual inflation rate was $\approx 75\%$
 - ▶ Policy rate was 50%
 - ▶ Mean inflation expectation was 58%
- Firms divided into 5 groups: Descriptive Stats Random
 - ▶ 4 treatment groups
 - ▶ 1 control group
- **Info treatments:** Professional forecasts, CBRT projections-target
- **Matched firm-level administrative data** sources
 - ▶ Balance Sheet and Income Statement
 - ▶ Credit registry (stock and flow)
 - ▶ Firm-level Employment and wage
 - ▶ B2B Sales
 - ▶ Foreign Currency Transactions

Information Treatments

Treatment	Horizon	Value Wording	
0 Control	-	-	-
1 Forecast (Professionals)	1-year	33%	According to SPF, professionals predict ...
2 Forecast (CBRT, short-run)	2024 EOY	38%	According to Inflation Report, CBRT predicts ...
3 Forecast (CBRT, long-run)	2025 EOY	14%	According to Inflation Report, CBRT predicts ...
4 Target (CBRT, long-run)	-	5%	CBRT's inflation target is ...

- Publicly available information pieces
- End-of-year forecasts (EOY), 1-year ahead forecasts, target
- Exact wording

RCT Procedure

- **Stage 1:** Regular **May BTS** conducted (priors collected)
 - **Stage 2:** RCT conducted **two days later** (information provided)
 - **Stage 3:** Following 4 months, post-treatment behavior monitored
-

- Inflation Expectations of Firms
- Mean inflation expectation is 58%.
 - ▶ 10th percentile expects 30%
 - ▶ 90th percentile expects 89%
- Real sale growth expectation 4.4%.
 - ▶ 10th percentile expects -16%
 - ▶ 90th percentile expects 36%

RCT Procedure

Elicit **prior** expectations and the corresponding planned decisions

RCT Procedure

Elicit **prior** expectations and the corresponding planned decisions

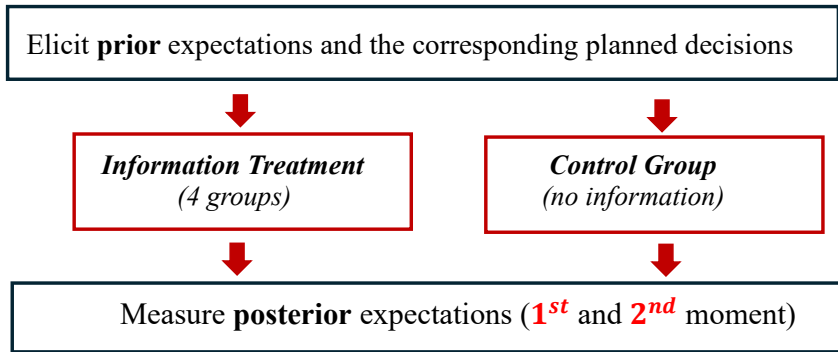


Information Treatment
(4 groups)

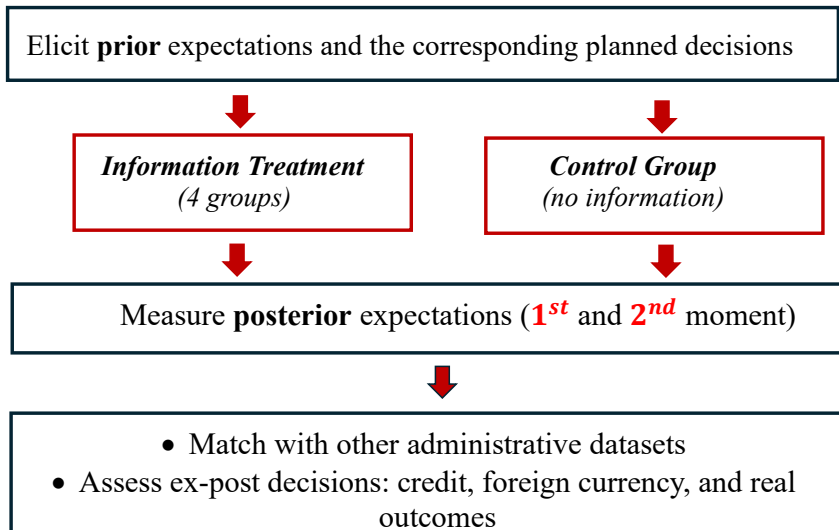


Control Group
(no information)

RCT Procedure



RCT Procedure



Treatment Effects on Expectations

- Assess the impact of the information treatments on expectations

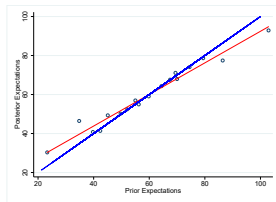
$$\begin{aligned}\text{Posterior}_i &= \alpha_0 + \beta_0 \text{Prior}_i \\ &+ \sum_{j=1}^4 \beta_j \times I\{i \in \text{Treat } j\} \times \text{Prior}_i \\ &+ \sum_{j=1}^4 \alpha_j \times I\{i \in \text{Treat } j\} + \gamma X_i + \varepsilon_i\end{aligned}$$

- Key components:
 - ▶ i : Respondent in the firm.
 - ▶ Prior_i : Firm's prior (pre-treatment) inflation expectation.
 - ▶ Posterior_i : Firm's posterior (post-treatment) inflation expectation.
- Interpretation of coefficients:
 - ▶ β_0 : Strength of prior beliefs in shaping posterior expectations (1 under FIRE).
 - ▶ β_j : Effectiveness of treatments in influencing expectations (0 under FIRE).
- Create **exogenous variation in expectations**, enabling causal analysis.

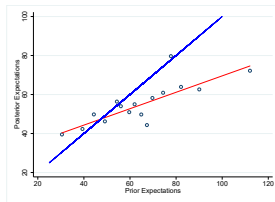
Treatment Effects on Expectations

	CPI		PPI	
	(1) mean	(2) variance	(3) mean	(4) variance
Revisions in beliefs immediately after treatment				
Prior mean	0.81*** (0.05)	0.05*** (0.01)	0.80*** (0.04)	0.04*** (0.01)
Prior mean × T1	-0.27*** (0.07)	-0.01 (0.01)	-0.37*** (0.07)	-0.02*** (0.01)
Prior mean × T2	-0.23*** (0.07)	-0.01 (0.01)	-0.29*** (0.06)	-0.01*** (0.01)
Prior mean × T3	-0.12** (0.06)	-0.02 (0.01)	-0.22*** (0.07)	-0.01 (0.01)
Prior mean × T4	-0.13*** (0.0654)	-0.03*** (0.0122)	-0.18*** (0.0680)	-0.02*** (0.0102)
T1 (SPF expectations)	10.13*** (3.75)	0.18 (0.77)	18.92*** (3.94)	1.23*** (0.61)
T2 (CBRT 1-y ahead forecast)	10.52*** (4.01)	0.42 (0.74)	16.14*** (3.71)	0.21 (0.62)
T3 (CBRT 2-y ahead forecast)	1.73 (3.95)	1.02*** (0.61)	9.96*** (3.76)	1.03*** (0.58)
T4 (Inflation Target)	7.51*** (3.94)	2.05*** (0.72)	11.13*** (3.78)	1.29*** (0.62)
Firm Controls, Sector FE, Province FE	✓	✓	✓	✓
R-squared	0.72	0.41	0.74	0.40
Observations	1,181	1,181	1,181	1,181

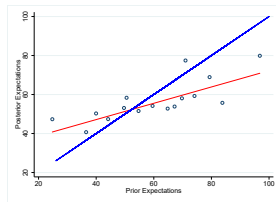
Treatment Effects on Expectations



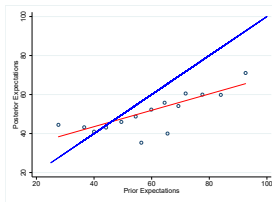
(a) Control



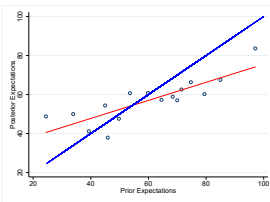
(b) Treatment #1



(c) Treatment #2



(d) Treatment #3



(e) Treatment #4

Figure: Prior and Posterior CPI Beliefs for Control/Treatment Groups

Treatment Effects on Expectations

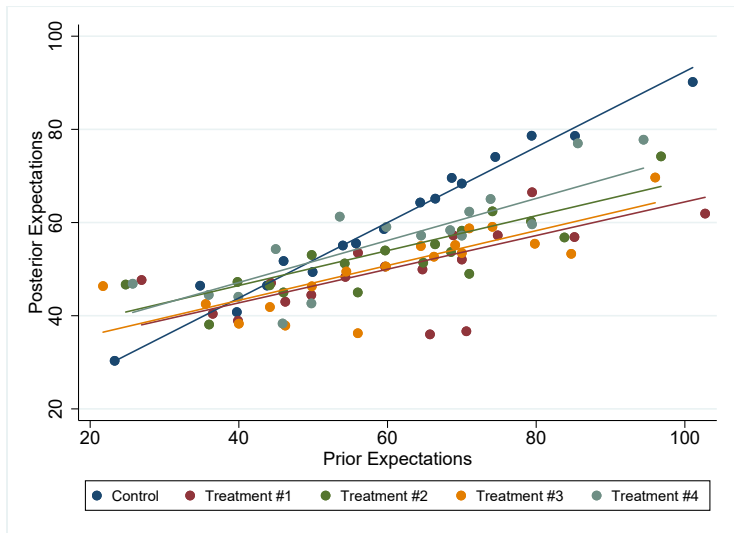


Figure: Response of Inflation Expectations by Treatment Type

Outline

- 1 Introduction and Research Questions
- 2 Methodology and Empirical Setting
- 3 Causal Impact on Firms' Decisions and Expectations
 - Firms' Wage, Price and Economic Outlook Expectations
 - Borrowing Behavior
 - Real Outcome (employment, sales, inventory)
- 4 Conclusion

Causal Impact on Expectations

- Analyze the causal impact of exogenous variation in inflation expectations on firms' decisions (Coibion et al., 2022):

$$Y_{i,t+h} = \beta_1 \mathbf{Post}_{i,t}^{mean} + \beta_2 \mathbf{Prior}_{i,t}^{mean} + \gamma X_{i,t-1} + \delta_s + \phi_p + \varepsilon_{i,t+h}$$

- $Y_{i,t+h}$ includes:
 - ▶ Quantitative expectations: wages, unit costs, prices (12 months ahead)
 - ▶ Realized outcomes: credit amount, cost, employment, wages, sales, purchases
- $\mathbf{Post}_{i,t}^{mean}$: Posterior mean inflation expectation
- Posterior expectation is instrumented with:

$$\mathbf{Post}_{i,t}^{mean} = \alpha_0 + \sum_{j=1}^4 \beta_j \times I\{i \in \text{Treat } j\} \times \mathbf{Prior}_{i,t}^{mean} + \sum_{j=1}^4 \alpha_j \times I\{i \in \text{Treat } j\} + \varepsilon_{i,t}$$

Fact #1: Strong Impact on Expectations

	Effect on Firms' Expectations		
	(1) Wage	(2) Unit Cost	(3) Price
Posterior Mean	0.58** (0.25)	0.53*** (0.18)	0.55*** (0.18)
Prior Wage Growth Perception	0.25*** (0.05)	0.10*** (0.03)	
Prior Price Growth Perception			0.30*** (0.03)
First Stage F-stat (KP Wald)	50.17	49.91	48.96
R-squared	0.25	0.32	0.30
Observations	1,189	1,187	1,183
Firm Controls, Sector FE, Province FE	✓	✓	✓

- Strong pass-through, but less than 1

Fact #1: Strong Pass-through to Price-Wage Expectations

- Pass-through rates from next 12-month inflation expectations:
 - ▶ To **wage** expectations: 58%
 - ▶ To **unit cost** expectations: 53%
 - ▶ To **own price** expectations: 55%

- Pass-through rates in low inflation environments are **low**: $\approx 25\%$
 - ▶ Hajdini et al. (2023), Abberger et al. (2024), Baumann et al. (2024)
- Contrast with Savignac et al. (2024):
 - ▶ **No significant link** between wage and price expectations in their findings

Fact #2: Higher expectation \Rightarrow increased pessimism

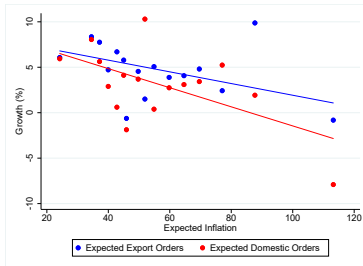
	Effect on Firm's Expectations		
	(1) Own Bus. Outlook	(2) Economic Outlook	(3) Credit Conditions
Posterior Mean	0.014*** (0.003)	0.024*** (0.002)	0.012*** (0.002)
Prior Economic Perception	0.230*** (0.032)	0.263*** (0.030)	
Prior Borrowing Cost Expectation			0.166*** (0.039)
First Stage F-stat (KP Wald)	49.91	50.25	50.53
R-squared	0.12	0.17	0.10
Observations	1,173	1,187	1,169
Firm Controls, Sector FE, Province FE	✓	✓	✓

- Evidence for the supply-side view of firms
- Lower Inflation \Rightarrow better economic outlook

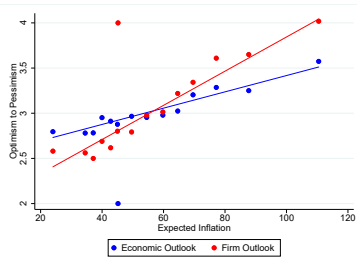
Fact #2: Higher expectation \Rightarrow increased pessimism

- A 1 SD (20pp) rise in inflation expectations increases **pessimism**:
 - ▶ By 0.48 points for **aggregate economic outlook** next 3 months
 - ▶ By 0.28 points for **firms' own business expectations**
 - Higher expectations \Rightarrow tighter credit conditions
 - ▶ More so for small firms (financially more vulnerable)
-
- **Supply-sided mindset of firms:**
 - ▶ \uparrow inflation expectation \Rightarrow **weaker** growth and **costlier** financing
 - ▶ \downarrow inflation expectation \Rightarrow **stronger** growth and **cheaper** financing

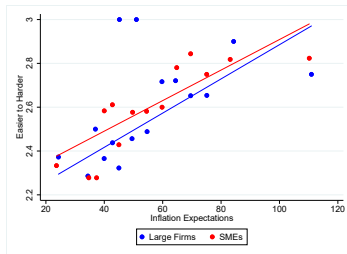
Fact #2: Descriptive Evidence



(a) Export and Domestic Order



(b) Aggregate and Firm Outlook



(c) Financial Conditions

Borrowing: Impact on Credit and Financing Cost

	(1)	(2)	(3)	(4)
	$y_{i,t+1}$	$y_{i,t+2}$	$y_{i,t+3}$	$y_{i,t+4}$
Panel A: Effect on Credit				
Posterior Mean	0.30** (0.14)	0.37** (0.16)	0.38*** (0.13)	0.17 (0.11)
First Stage F-stat (KP Wald)	59.77	59.77	59.77	59.78
Observations	1,181	1,181	1,181	1,181
Panel B: Effect on Borrowing Cost				
Posterior Mean	-0.28*** (0.08)	-0.28*** (0.10)	-0.33** (0.15)	-0.31* (0.17)
First Stage F-stat (KP Wald)	20.63	20.62	20.63	20.63
Observations	595	567	534	582
Firm Controls	✓	✓	✓	✓
Sector FE	✓	✓	✓	✓
Province FE	✓	✓	✓	✓

- More credit with lower cost (compositional shift)

Fact #3: Higher expectation \Rightarrow increased credit usage

- **Higher Credit Demand:**

- ▶ 10 pp rise in expectations \Rightarrow 3 percent **rise in new credit** usage
- ▶ Shift borrowing from **short-term** to **long-term** credit
- ▶ Cost decline due to shift in maturity

- **Refinancing Channel as Key Driver:**

- ▶ **Lock-in current interest rates** to mitigate future cost increases
- ▶ Real value of debt will erode over time
- ▶ Other Possible Channels

- Yet, why do price and quantity move in different directions?

Fact #3: Short vs Long Term Credit

	(1) $y_{i,t+1}$	(2) $y_{i,t+2}$	(3) $y_{i,t+3}$	(4) $y_{i,t+4}$
Panel A: Effect on Long-term Credit				
Posterior Mean	0.33** (0.14)	0.36** (0.16)	0.40** (0.13)	0.03 (0.10)
First Stage F-stat (KP Wald)	59.77	59.77	59.77	59.78
Observations	1,181	1,181	1,181	1,181
Panel B: Effect on Long-term Borrowing Cost				
Posterior Mean	0.16*** (0.03)	0.18*** (0.04)	0.14** (0.07)	0.10* (0.06)
First Stage F-stat (KP Wald)	20.56	17.38	18.89	21.31
Observations	271	254	251	261
Panel C: Effect on Short-term Credit				
Posterior Mean	-0.07* (0.04)	-0.02 (0.02)	-0.04*** (0.02)	-0.04 (0.03)
First Stage F-stat (KP Wald)	59.77	59.77	59.77	59.78
Observations	1,181	1,181	1,181	1,181
Panel D: Effect on Short-term Borrowing Cost				
Posterior Mean	-0.05** (0.02)	-0.07*** (0.02)	-0.06** (0.03)	-0.05 (0.03)
First Stage F-stat (KP Wald)	10.92	11.47	10.85	13.12
Observations	324	313	283	321
Firm Controls, Sector FE, Province FE	✓	✓	✓	✓

- The changes are demand-driven (price and quantity movements)

- Outstanding Credit

Fact #3: Higher expectation \Rightarrow long-term credit usage

- **Long-Term** financing dominates:

- ▶ Higher demand for long-term credit drives down average costs
- ▶ **Long-term** financing cost: 48%
- ▶ **Short-term** cost: 52%

- Channels in Play:

- ▶ **Refinancing Channel:** Major driver; firms **extend debt maturities**
- ▶ **Working Capital Channel:** Contributes minimally; reduced short-term credit demand (reduced need for working capital)

- **Key Finding:**

- ▶ Higher inflation expectations reshape firms' borrowing behavior, favoring long-term credit at a reduced average cost.

Fact #4: Higher Expectation \Rightarrow shift towards Lira credits

	(1)	(2)	(3)	(4)
	$y_{i,t+1}$	$y_{i,t+2}$	$y_{i,t+3}$	$y_{i,t+4}$
Panel A: TL Denominated Outstanding Credit				
Posterior Mean	0.15***	0.14***	0.16***	0.14***
	(0.02)	(0.01)	(0.02)	(0.02)
Panel B: FX Denominated Outstanding Credit				
Posterior Mean	-0.02**	-0.02	-0.02	-0.01
	(0.01)	(0.02)	(0.02)	(0.01)
Firm Controls	✓	✓	✓	✓
Sector FE	✓	✓	✓	✓
Province FE	✓	✓	✓	✓
First Stage F-stat (KP Wald)	69.54	69.54	69.54	69.54
Observations	1,181	1,181	1,181	1,181

- Liability side dedollarization (FC \Rightarrow LC debt)

Fact #4: Higher Expectation \Rightarrow shift towards Lira credits

Firms with heightened inflation expectations:

- Rise in **Lira-denominated** credit
 - ▶ 10 pp \uparrow in expectations \Rightarrow 1.5 percent rise in TL credit
 - ★ Debt erosion impact of inflation
- Decline in **FX-denominated** credit
 - ▶ 10 pp \uparrow in expectations \Rightarrow 0.2 percent decline in FX credit
 - ★ Higher perceived costs from currency depreciation.

● Key Finding: Liability-side dedollarisation

- ▶ Shift in the composition of liabilities toward Lira-denom credit
- ▶ Firms perceive borrowing in TL as cheaper than FX

Fact #5: Asset Side: More Foreign Currency Holdings

	(1)	(2)	(3)	(4)
	$y_{i,t+1}$	$y_{i,t+2}$	$y_{i,t+3}$	$y_{i,t+4}$
Panel A: Effect on Foreign Currency Buying				
Posterior Mean	0.06*** (0.02)	0.03* (0.02)	0.05* (0.03)	0.02 (0.02)
First Stage F-stat (KP Wald)	58.45	58.46	58.45	58.45
Observations	1,181	1,181	1,181	1,181
Panel B: Effect on Foreign Currency Selling				
Posterior Mean	-0.16*** (0.05)	-0.05 (0.05)	-0.14*** (0.06)	-0.15*** (0.06)
First Stage F-stat (KP Wald)	54.04	54.04	54.04	54.04
Observations	1,181	1,181	1,181	1,181
Firm Controls	✓	✓	✓	✓
Sector FE	✓	✓	✓	✓
Province FE	✓	✓	✓	✓

- Asset side dollarization (FX holding ↑)

Fact #5: Higher Expectation \Rightarrow more FX holdings

Firms with heightened inflation expectations:

- Rise in **Foreign Currency Purchases:**

- ▶ 10 pp \uparrow in expectations \Rightarrow 0.6 pp increase in FX purchases

- Decline in **Foreign Currency Sales:**

- ▶ 10 pp \uparrow in inflation expectations \Rightarrow 1.6 pp decrease in FX sales

- **Key Insight: Asset-side dollarisation**

- ▶ Reflects hedging behavior against domestic inflation
 - ★ a common behavior in emerging markets

Fact #6: Higher Expectation \Rightarrow depressed real activity

	(1)	(2)	(3)	(4)
	$y_{i,t+1}$	$y_{i,t+2}$	$y_{i,t+3}$	$y_{i,t+4}$
Panel A: Effect on Employment				
Posterior Mean	-0.05***	-0.04**	-0.05***	-0.03*
	(0.02)	(0.02)	(0.02)	(0.02)
First Stage F-stat (KP Wald)	69.54	69.54	69.54	69.54
R-Squared	0.12	0.13	0.12	0.10
Panel B: Effect on Total Sales				
Posterior Mean	-0.01***	-0.02**	-0.01	-0.03
	(0.006)	(0.01)	(0.14)	(0.10)
First Stage F-stat (KP Wald)	68.19	68.19	68.19	68.19
R-Squared	0.14	0.15	0.13	0.12
Panel C: Effect on Total Purchases				
Posterior Mean	0.01***	0.02***	0.01***	0.01***
	(0.002)	(0.003)	(0.004)	(0.005)
First Stage F-stat (KP Wald)	69.24	69.24	69.24	69.24
R-Squared	0.10	0.11	0.09	0.13
Panel D: Effect on Wages				
Posterior Mean	0.04	0.07**	0.05*	0.02
	(0.02)	(0.03)	(0.03)	(0.02)
First Stage F-stat (KP Wald)	69.75	69.75	69.75	69.75
R-Squared	0.13	0.12	0.09	0.13
Firm Controls, Sector FE, Province FE	✓	✓	✓	✓
Observations	1,181	1,181	1,181	1,181

Fact #6: Higher Expectation \Rightarrow depressed real activity

- **Sales and Employment:**

- ▶ 10 pp rise in expectations leads to:
 - ★ 0.5 percent **decline in employment growth**
 - ★ 0.2 percent **decline in sales growth**
- ▶ **"Supply-sided"** view of the economy

- **Wages:**

- ▶ 10 pp rise in expectations \Rightarrow 0.7% **increase in wage**
- ▶ Sticky wages lead to a slower adjustment in the short run

- **Key Insight:**

- ▶ Reduce employment and sales consistent with their expectations

Fact #6: Higher Expectation \Rightarrow more purchasing

- **Purchases:**

- ▶ 10 pp increase in inf. expectations \Rightarrow 0.2% rise in purchases

- **Inflation Hedge:** purchase early to avoid future price increases

- ▶ Better to hold goods than lose value holding money
- ▶ Mirrors consumer hoarding behavior
- ▶ Recently seen during tariff changes

- **Overall Effect:**

- ▶ Despite reduction in employment and sales, firms increase purchases \Rightarrow cost-cutting measures

Outline

- 1 Introduction and Research Questions
- 2 Methodology and Empirical Setting
- 3 Causal Impact on Firms' Decisions and Expectations
 - Firms' Wage, Price and Economic Outlook Expectations
 - Borrowing Behavior
 - Real Outcome (employment, sales, inventory)
- 4 Conclusion

Conclusion

Effect on;				
<i>Expectations (RCT Survey)</i>	Wage	Cost	Prices	Optimism
	58%	53%	55%	↓
<i>Borrowing (Administrative)</i>	Long-term	Short-term	LC debt	FC debt
	↑	↓	↑	↓
<i>Real Outcome (Administrative)</i>	Employment	Sales	Purchases	Wages
	-0.5%	-0.2%	0.2%	0.7%

- Inflation expectations have causal impacts on firm decisions.
 - 1 Wage and price expectations: 60% pass-through
 - 2 More credit usage, lower cost, shift from short-term to long-term
 - 3 Lower employment and sales, higher purchases
- Evidence supports the "supply-sided" perspective of firms.