Discussion on "*Turkiye's Homemade Crisis: Lessons for Emerging Markets*"

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Türkiye's Homemade Crises: Lessons for Emerging Markets

Overview of the Paper

- Examines CBRT's unconventional response to inflation post-2021
- Post-COVID inflation globally met with rate hikes
- CBRT cut rates, worsening imbalances
- FX interventions, complex regulatory measures
- Introduction of FX-protected deposits (KKM)

What is KKM?

- FX-protected deposit: Guarantees against lira depreciation
- Shifts currency risk to public balance sheet
- Intended to stop currency run and restore confidence

Model Outcomes

- Policies form a destabilizing sequence
- Each intervention leads to new vulnerabilities
- Delayed adjustments increase long-run costs
- Highlights risks of financial engineering over conventional policy

Lessons for Emerging Markets

- Financial engineering ≠ substitute for interest rate policy
- Importance of central bank independence
- Credibility erosion has lasting macro consequences

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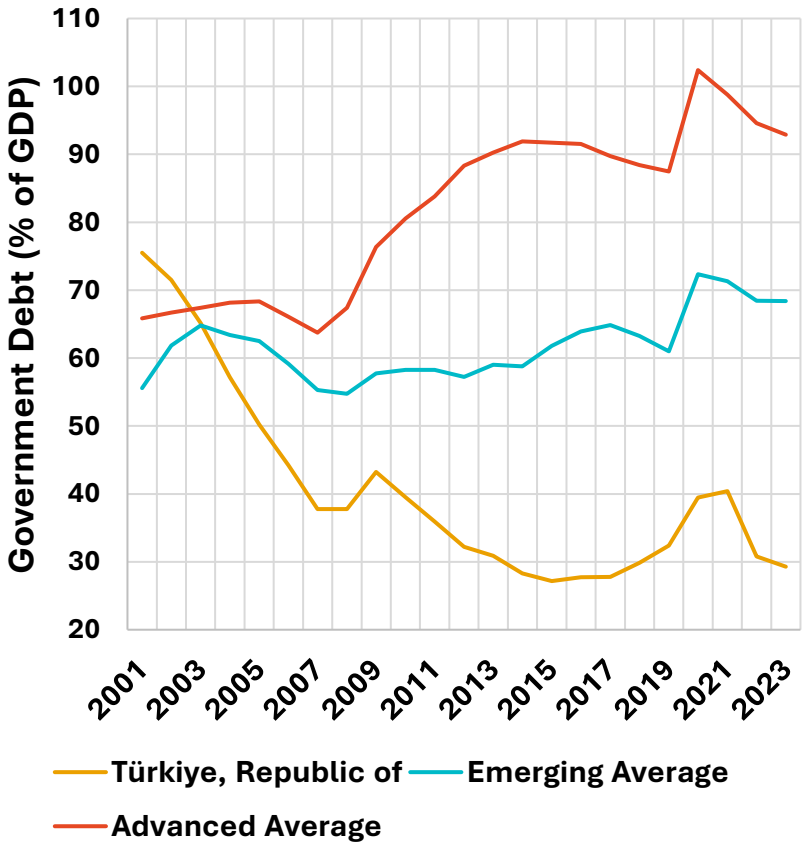
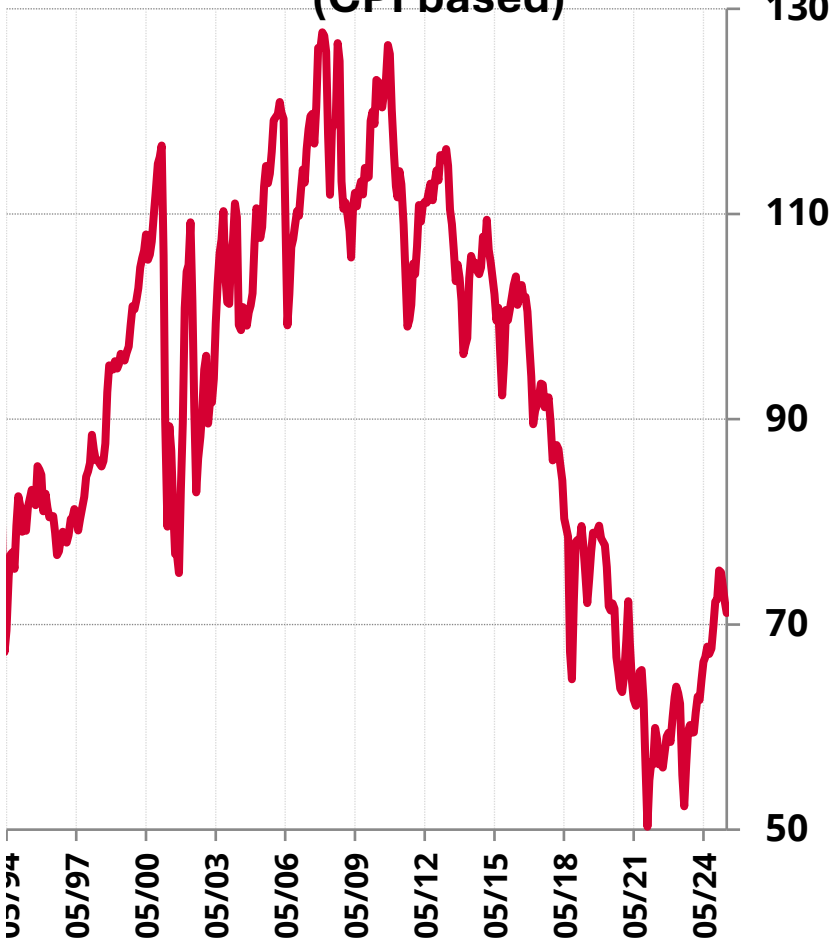
The KKM Dilemma: *Who should bear the burden?*

i) **The Fiscal Authority and CBRT**
ii) **The Turkish Lira (via FX intervention)**
iii) **The Banking Sector**

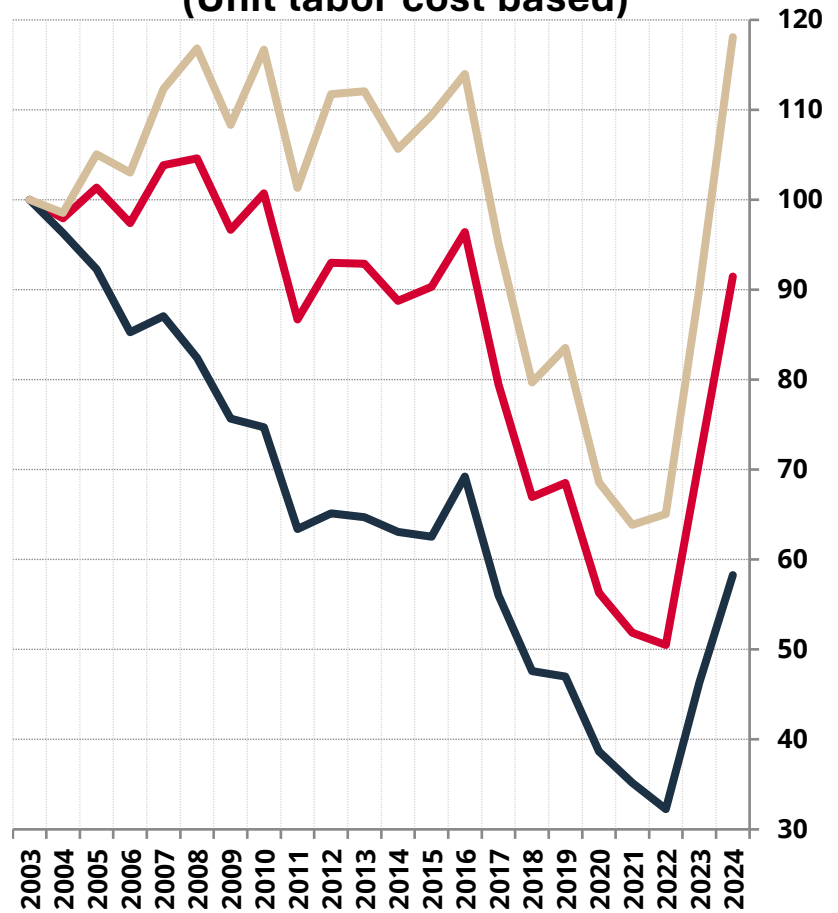
Gross Government Debt Across Countries (% of GDP)



Real Effective Exchange Rate (CPI based)

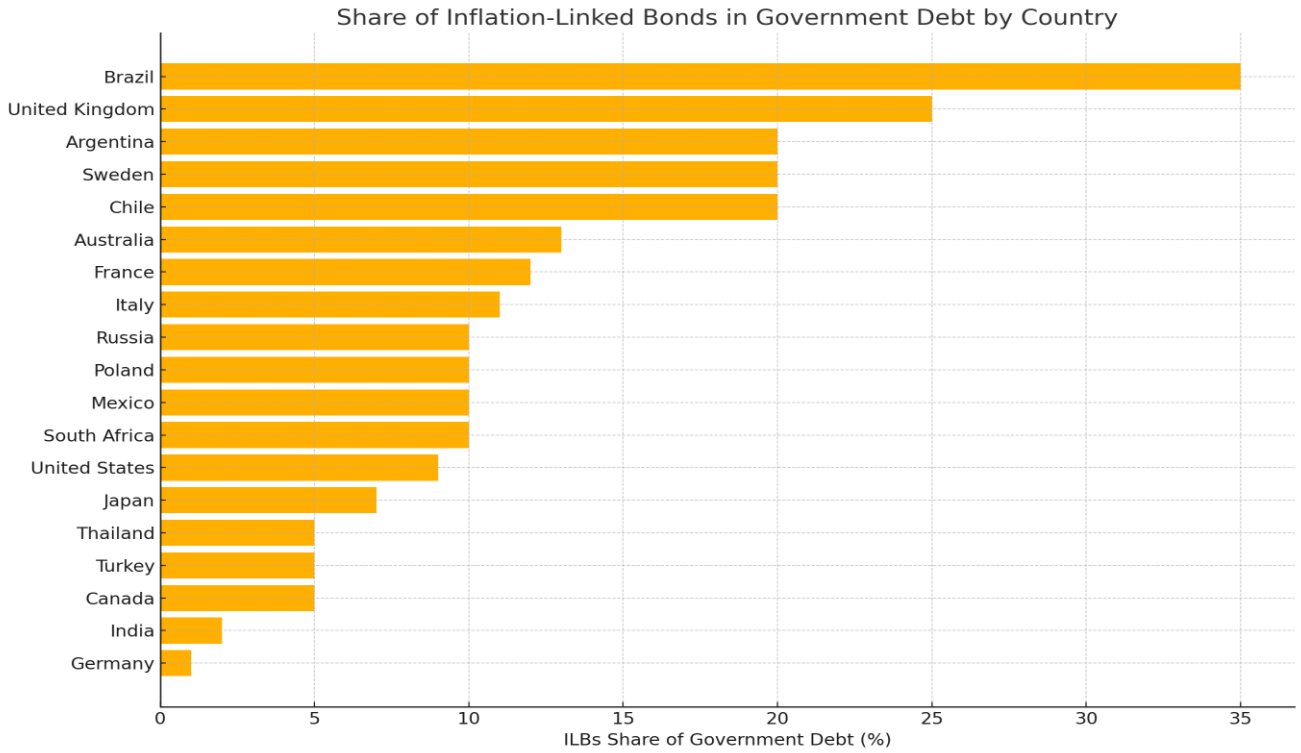


Real Effective Exchange Rate (Unit labor cost based)



If the authorities choose to bear the fiscal burden and refrain from intervening in the FX market, the mechanism effectively becomes a call option with inflation protection.

Dual Nature of *Inflation Linked Bonds (ILBs)*



- *ILBs can enhance inflation discipline (commitment device)*
- *But in weak-institution settings, may backfire (moral hazard)*
- *Institutional quality determines which effect dominates*

When do ILBs Work as a Commitment Device?

- *Independent and transparent statistical agencies*
- *Strong institutional credibility*
- *Coordinated fiscal and monetary policy*
- *Stable inflation expectations*

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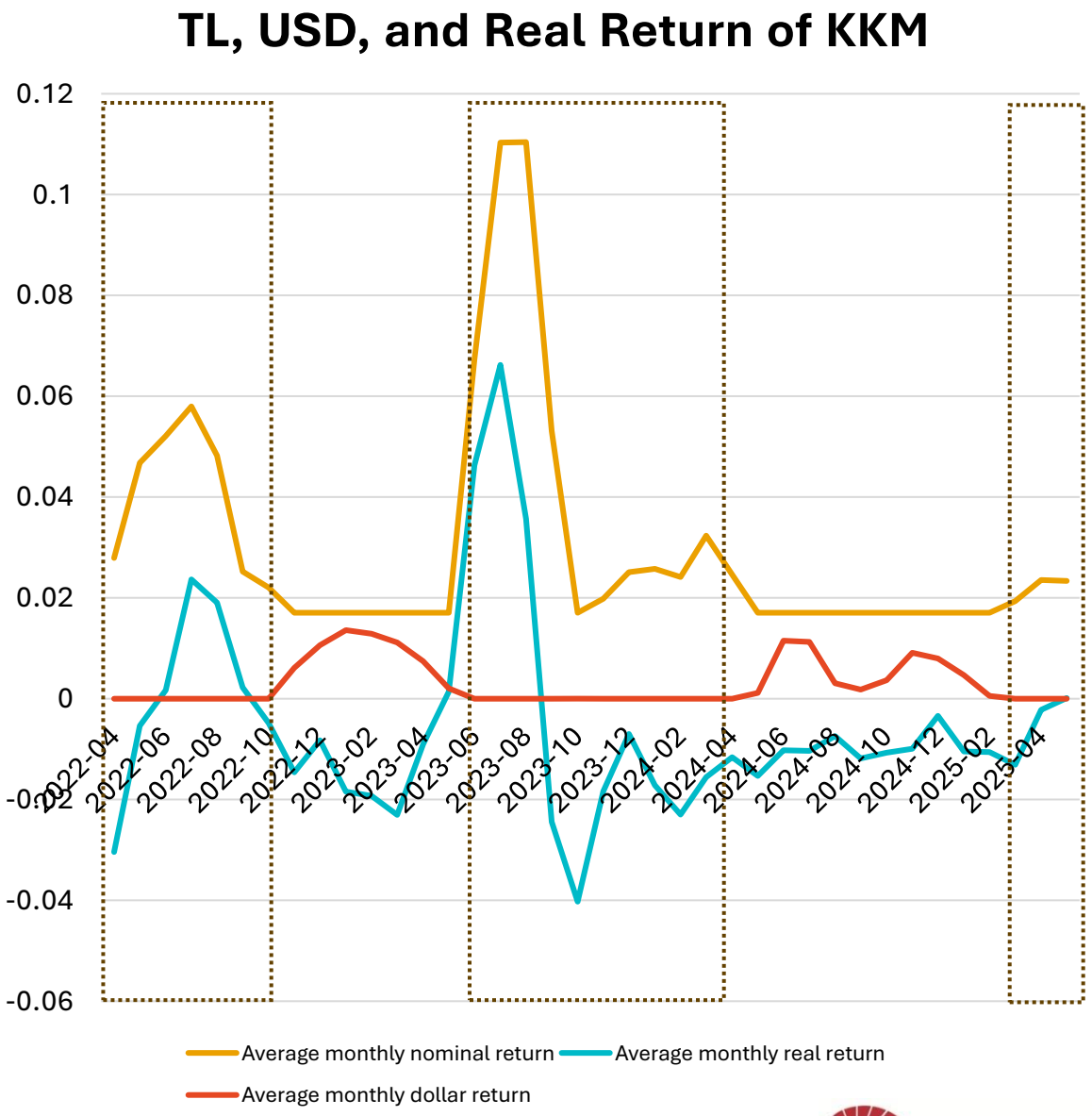
How much tightening did KKM provide?

- Using data on one of the largest Turkish private bank's (*Garanti Bank*) three-month KKM interest rates; average real and nominal return and return in terms of USD are calculated. (January 2022- May 2025)
- On average, the embedded call option in the KKM was in-the-money 42% of the time.
- KKM provided moderate return in dollars but poor return in real terms.

Average Annual Return	USD	Real
KKM:	5.2%	-2.8%
BIST-100 Index:	12.2%	3.4%
House Price Index:	18.8%	9.4%



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KKM as a commitment device: Impact of KKM on Inflation Expectations

Estimating inflation expectations

$$\begin{aligned} InfEx_t &= \beta_0 + \beta_1 InfEx_{t-1} + \beta_2 \pi_t + \beta_3 i_t + \beta_4 I\_KKM_t \\ &\quad + \beta_5 I\_KKM_t \pi_t + \beta_6 I\_postKKM_t + \beta_7 I\_postKKM_t \pi_t \\ &\quad + \beta_8 I\_KKM_t i_t + \beta_9 I\_postKKM_t i_t \end{aligned}$$

where

$InfEx_t$: 12 month inflation expectation at t,
π_t : inflation at time t,
i_t : CBRT policy interest rate at time t,
I_KKM_t : KKM dummy at time t,
$I\_postKKM_t$: post KKM dummy at time t,

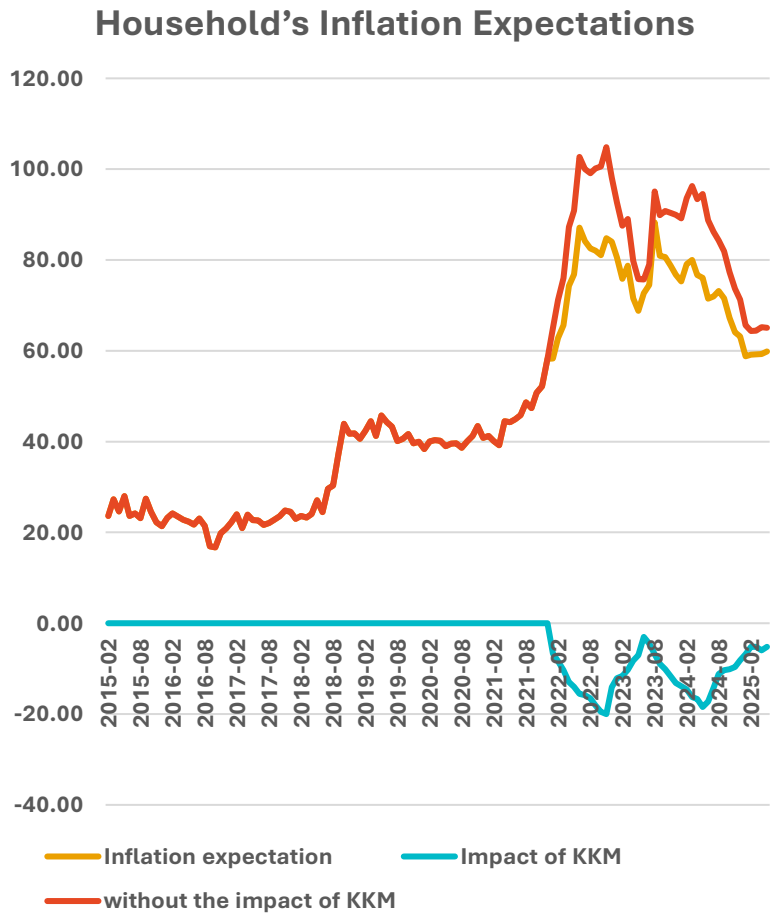
Results:

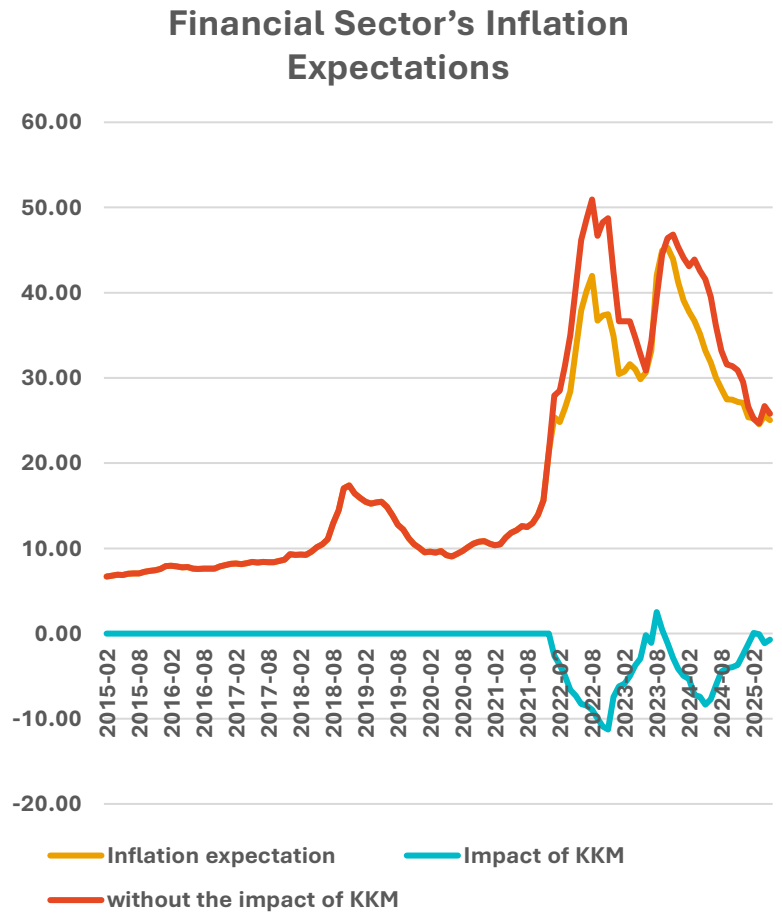
- Before the introduction of KKM, inflation expectations were responsive to actual inflation but not to the CBRT policy rate.
- After KKM was introduced, sensitivity to actual inflation declined significantly.
- Sensitivity to the CBRT policy rate increased notably, but the coefficient was **positive**, indicating that markets perceived the CBRT as being behind the curve.
- In the post-KKM period—coinciding with a return to more orthodox policies—sensitivity to the CBRT policy rate remained significant but turned **negative**, suggesting restored credibility.

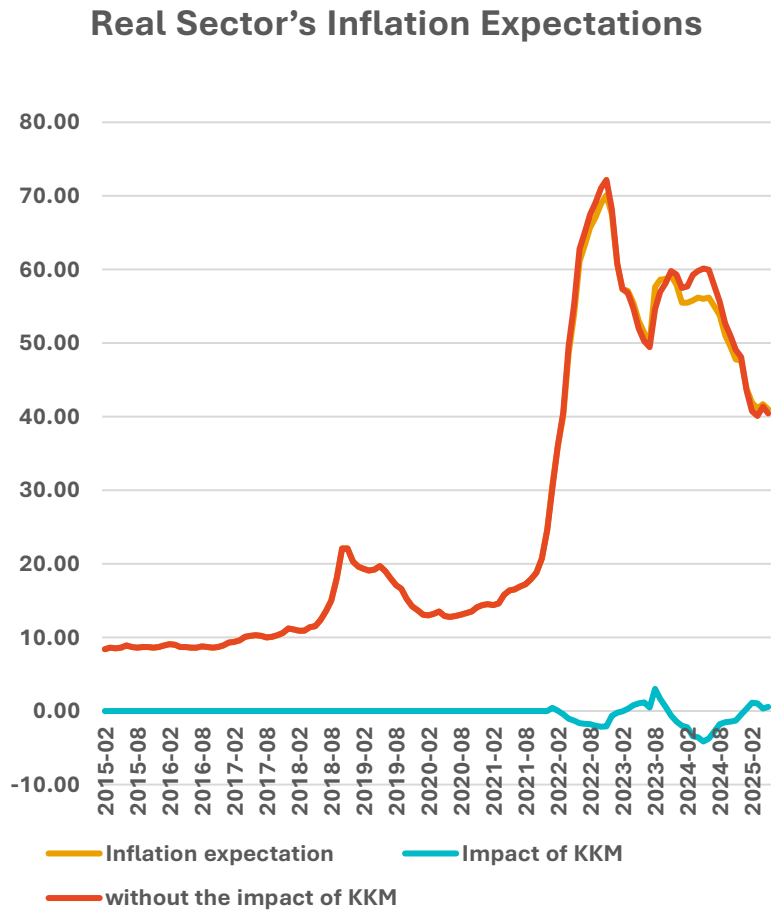
Estimation results for 12 month ahead inflation expectations

	Financial Sector	Households	Real Sector
β_0	0.376 (1.2)	0.838 (0.884)	0.323 (1.174)
$InfEx_{t-1}$:	0.711 *** (19.42)	0.837 *** (21.72)	0.723 *** (36.78)
π_t :	0.256 *** (8.09)	0.393 *** (4.331)	0.255 *** (8.621)
i_t :	−0.046 −(1.47)	−0.019 (−0.223)	0.009 (0.323)
I_KKM_t :	1.346 (0.86)	−0.267 (−0.061)	3.833 ** (2.239)
$I\_KKM_t\pi_t$:	−0.189 *** −(5.60)	−0.295 *** (−3.081)	−0.0669 ** (−2.104)
$I\_postKKM_t$:	20.33 *** (10.82)	18.01 *** (3.626)	14.40 *** (8.594)
$I\_postKKM_t\pi_t$:	−0.163 *** −(4.53)	−0.308 *** (−3.151)	−0.097 *** (−2.963)
$I\_KKM_t i_t$:	0.380 *** (4.17)	0.552 ** (2.232)	0.02 (0.205)
$I\_postKKM_t i_t$:	−0.325 *** −(6.73)	−0.261 ** (−2.151)	−0.219 *** (−5.49)
Obs.:	123	123	123
R^2	0.994	0.986	0.998

Counterfactual Exercise: Inflation Expectations with and without KKM







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KKM as a commitment device: Impact of KKM on Exchange Rate Expectations

Estimating exchange rate expectations

$$\begin{aligned} ExcEx_t &= \beta_0 + \beta_1 ExcEx_{t-1} + \beta_2 \pi_t + \beta_3 i_t + \beta_4 I\_KKM_t \\ &\quad + \beta_5 I\_KKM_t \pi_t + \beta_6 I\_postKKM_t + \beta_7 I\_postKKM_t \pi_t \\ &\quad + \beta_8 I\_KKM_t i_t + \beta_9 I\_postKKM_t i_t \end{aligned}$$

where

$ExcEx_t$:	12 month ahead exchange rate expectation at t,
π_t :	inflation at time t,
i_t :	CBRT policy interest rate at time t,
I_KKM_t :	KKM dummy at time t,
$I\_postKKM_t$:	post KKM dummy at time t,

Results:

- In the pre-KKM period, exchange rate expectations were sensitive to both inflation and the CBRT policy rate.
- During the KKM period, sensitivity to inflation declined, while sensitivity to the CBRT policy rate turned **positive**, suggesting that markets viewed the CBRT as falling behind the curve.
- In the post-KKM period—marked by a return to orthodox policies—sensitivity to the CBRT policy rate increased **in the expected (negative) direction**, reflecting improved policy credibility.

Estimation results for 12 month ahead exchange rate expectations

$ExcEx_t$	Estimated coefficients
β_0	−0.391 *** (−2.43)
$ExcEx_{t-1}$:	1.045 *** (38.19)
π_t :	0.106 *** (5.59)
i_t :	−0.083 *** (−5.18)
I_KKM_t :	−2.11 ** (−2.03)
$I\_KKM_t \pi_t$:	−0.126 *** (−6.03)
$I\_postKKM_t$:	4.81 *** (3.91)
$I\_postKKM_t \pi_t$:	−0.108 *** (−4.81)
$I\_KKM_t i_t$:	0.394 *** (8.25)
$I\_postKKM_t i_t$:	−0.039 * (−1.55)
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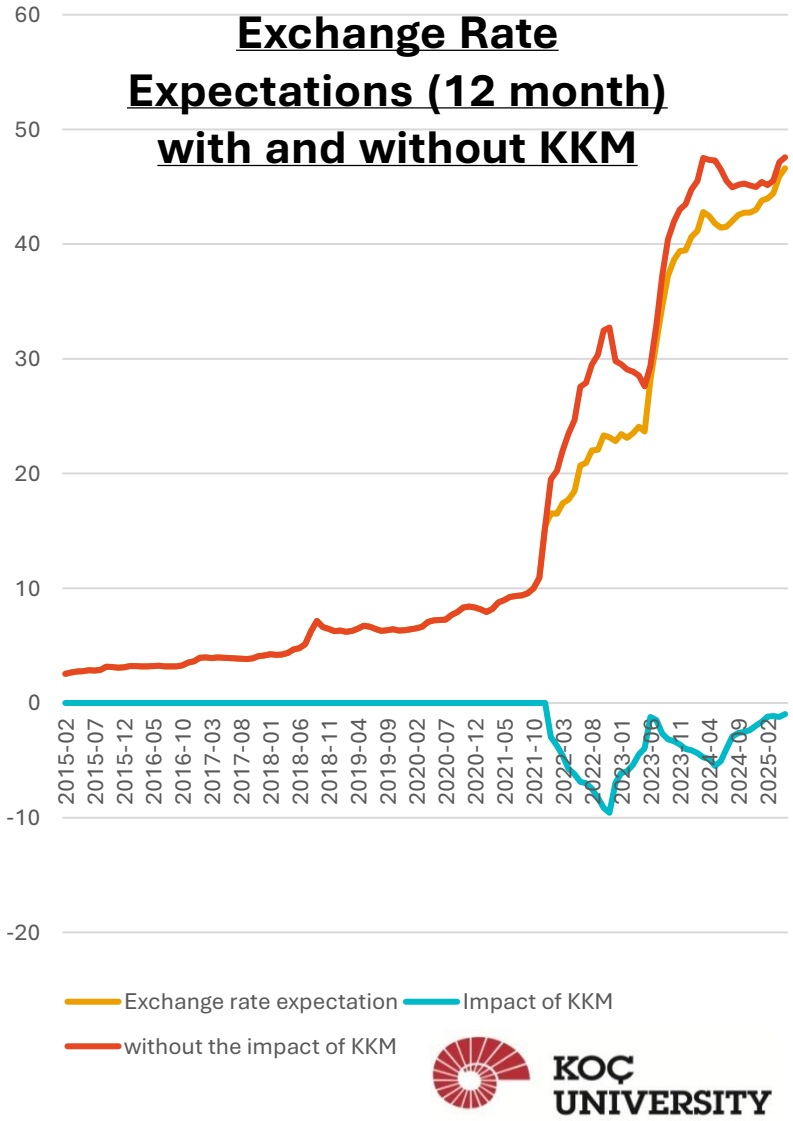
Obs.:	123
R^2	0.999

Counterfactual Exercise: Exchange Rate Expectations (12 month) with and without KKM



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Conclusions:

- This is a timely and important paper that introduces a novel model capturing the CBRT's unconventional policy response to inflation after 2021.
- The Turkish experience reaffirmed that financial engineering is no substitute for a credible interest rate policy. Erosion of central bank credibility carries lasting macroeconomic consequences.
- Policymakers primarily placed the burden of the KKM scheme on the **TL** and the **banking sector**, deliberately avoiding a significant fiscal cost.
- The KKM scheme did not lead to substantial monetary tightening but was effective in **preventing a currency run**.
- It functioned as a **commitment device**, helping anchor both exchange rate and inflation expectations.
- Following the return to orthodox policies, inflation and exchange rate expectations became more responsive to the CBRT policy rate, **indicating a restoration of policy credibility**.

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