

The Impact of Live Cattle and Meat Imports on Domestic Meat Prices in Türkiye

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Background

- Türkiye has been importing import live cattle and red meat since 2010.
 - To regulate rising domestic prices
 - To increase cattle herd numbers
- Ministry of Agriculture and Forestry (MAF) determines import quotas for cattle .
- The total value of live cattle and red meat imports reached over \$1.2 billion in 2024, and more than \$1.35 billion between January and October 2025.

Background

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- The total value of live cattle and red meat imports reached over \$1.2 billion in 2024, and more than \$1.35 billion between January and October 2025.
- The Consumer Price Index rose by 9.62 times between January 2017 and November 2025.
- During the same period, red meat prices rose by 17.6 times.

Figure 1: Slaughterhouse - red meat prices & Consumer Price Index (Jan, 2017=100)

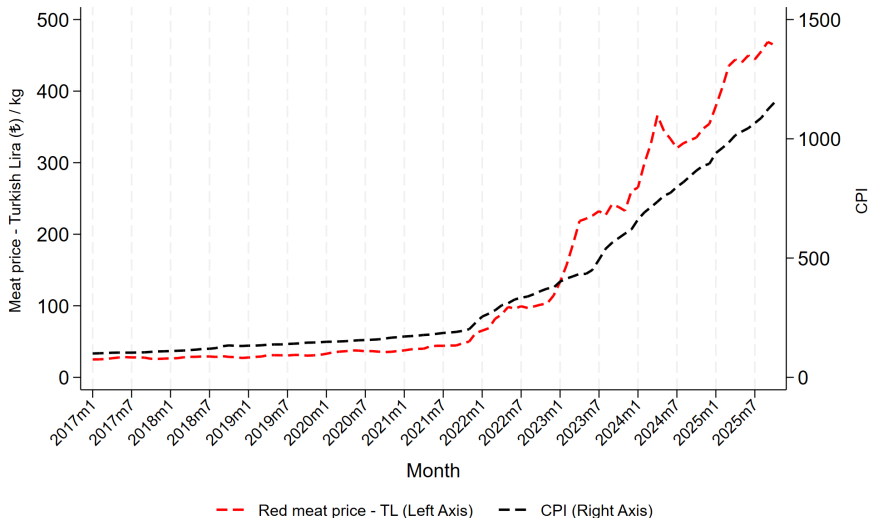


Figure 2: Slaughterhouse - red meat prices

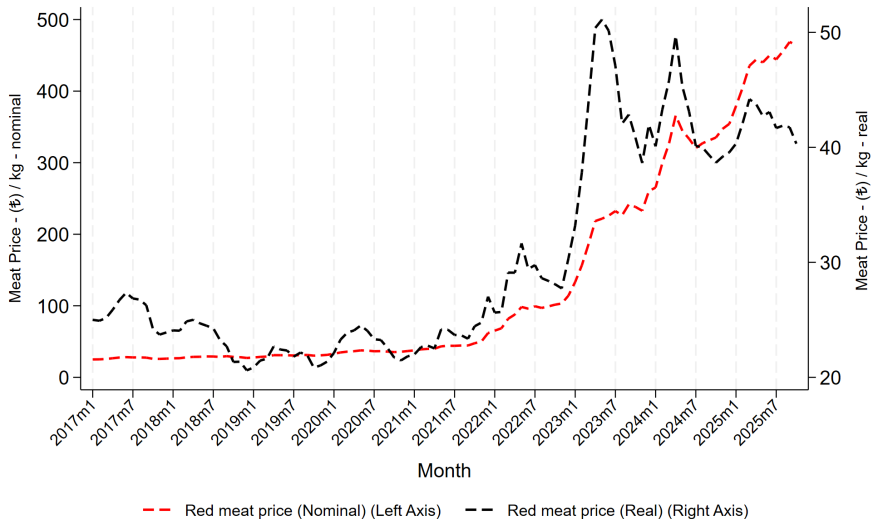


Figure 3: Slaughterhouse - red meat prices (real) (TL & USD)

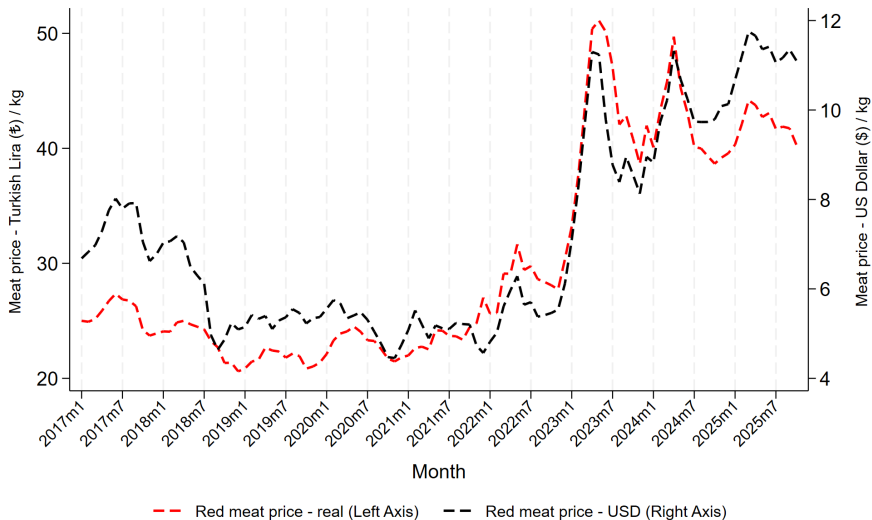


Figure 4: Monthly red meat price change

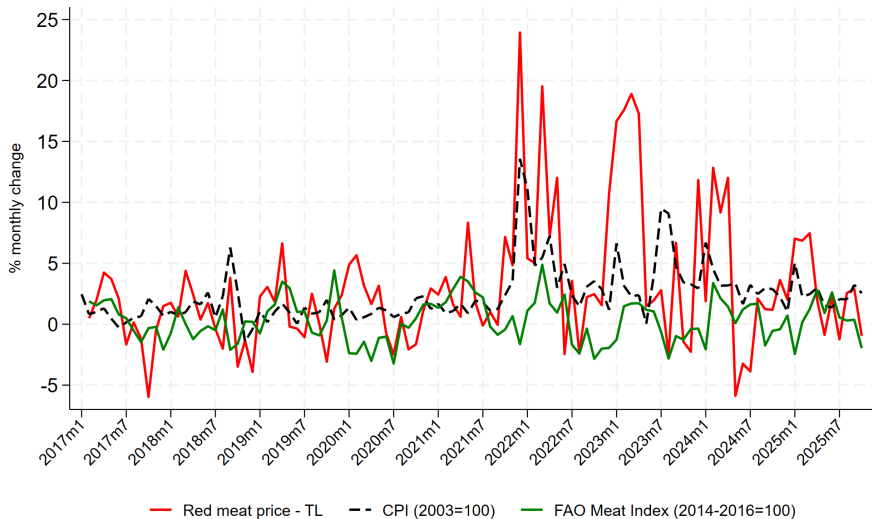


Figure 5: Monthly live cattle and red meat import

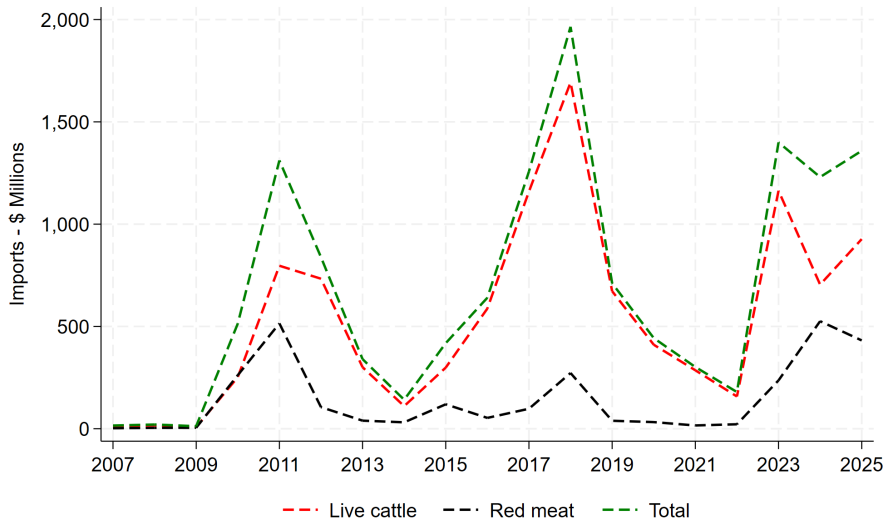
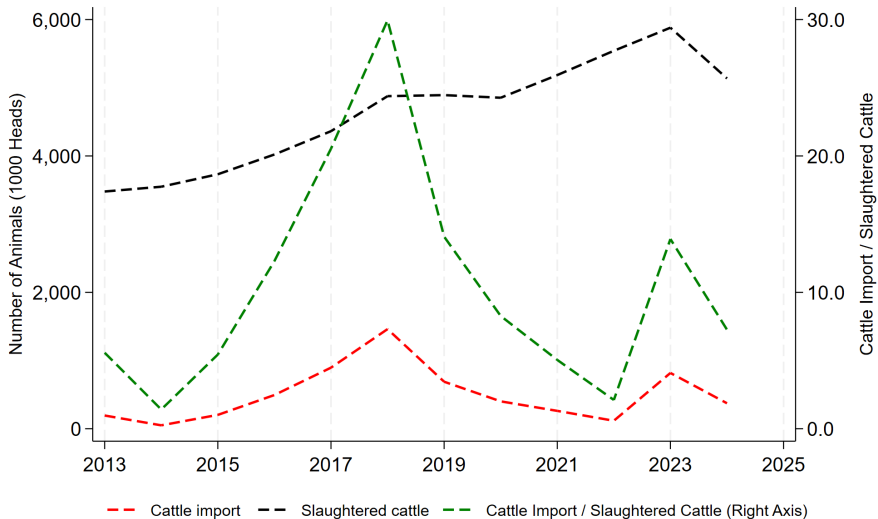


Figure 6: Slaughterhouse numbers and live cattle import



Question

Do live cattle and red meat imports curb rising domestic meat prices?

Econometric Model

Local Projections (LP) (Òscar, 2005)

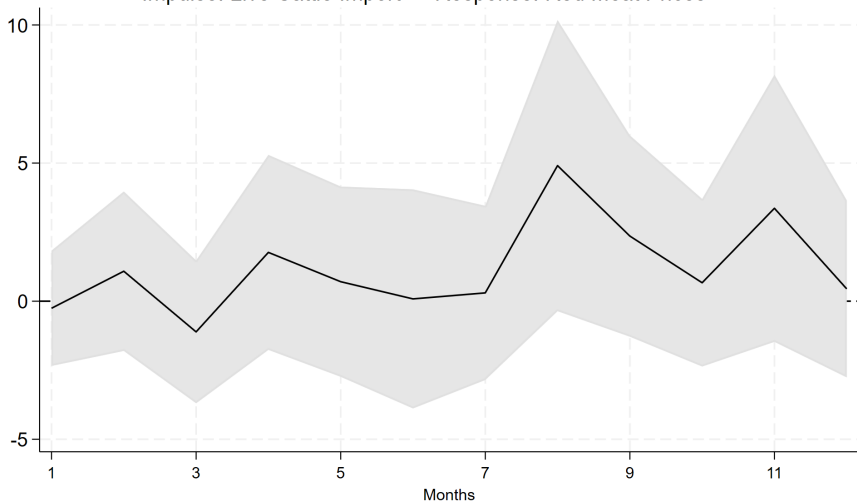
$$\mathbf{y}_{t+h-1} = \mathbf{B}_1^h \mathbf{y}_{t-1} + \mathbf{B}_2^h \mathbf{y}_{t-2} \dots + \mathbf{B}_p^h \mathbf{y}_{t-p} + \mathbf{D}^h \mathbf{x}_t + \mathbf{u}_t^h$$

- \mathbf{y}_t : Vector of endogenous variables:
 - Percentage change in domestic slaughterhouse prices $\% \Delta P_{Domestic}$
 - Percentage change in live cattle and red meat import $\% \Delta I$
 - Percentage change in FAO meat price index $\% \Delta P_{FAO}$
 - Percentage change in exchange rate $\% \Delta E$
 - Change in policy interest rate ΔR
- \mathbf{x}_t : Vector of **exogenous variables**
 - Eid (Sacrifice Holiday): Equals 1 for the month in which Eid occurs.
 - Accounts for approximately 15–20% of annual production (830,000 head of cattle and 2.5 million head of sheep and goats in 2025).

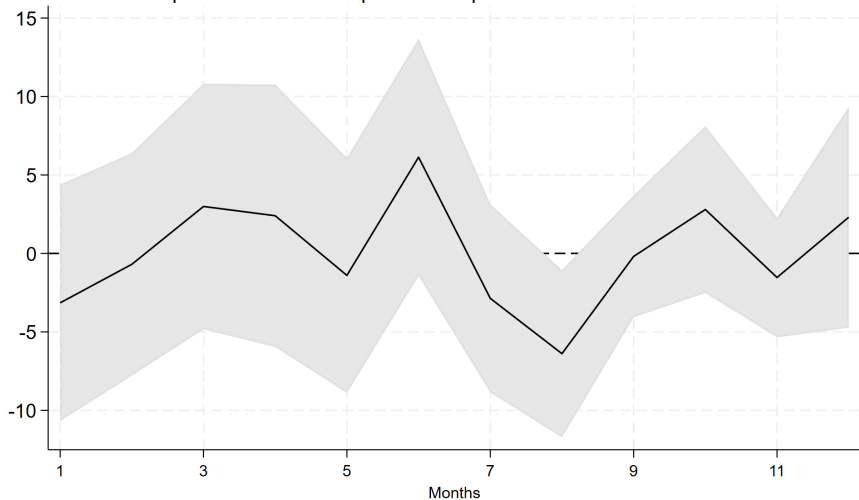
Monthly Data

- Domestic slaughterhouse prices (National Red Meat Council; UKON)
- Live cattle and red meat imports (United Nations Conference on Trade and Development; UNCTAD)
- Policy interest rate and exchange rate (Central Bank of the Republic of Türkiye; CBRT)
- Global meat price index (Food and Agriculture Organization; FAO)

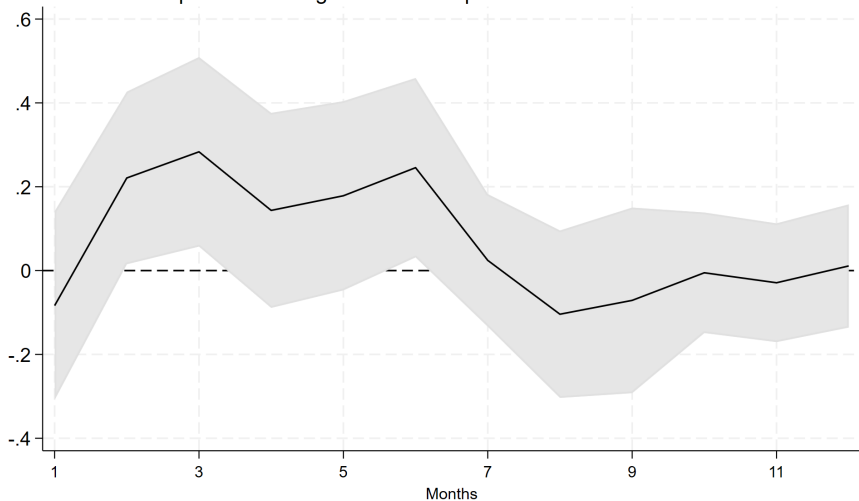
Impulse: Live Cattle Import → Response: Red Meat Prices



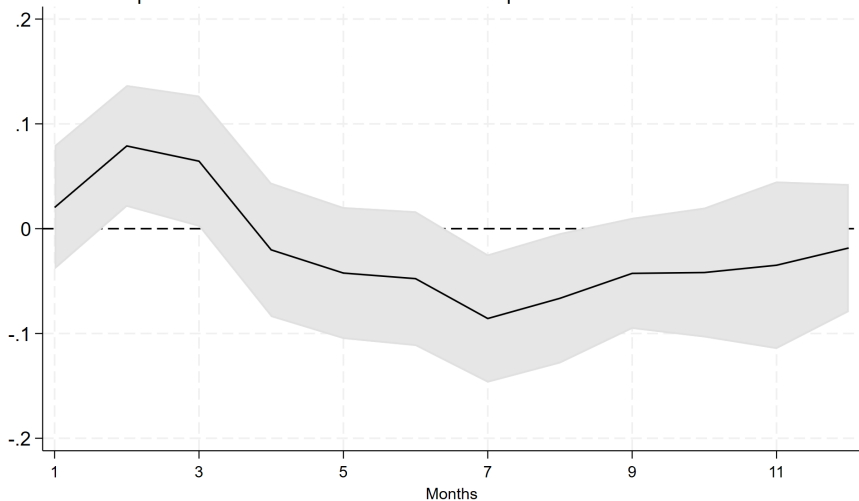
Impulse: Red Meat Import → Response: Red Meat Prices



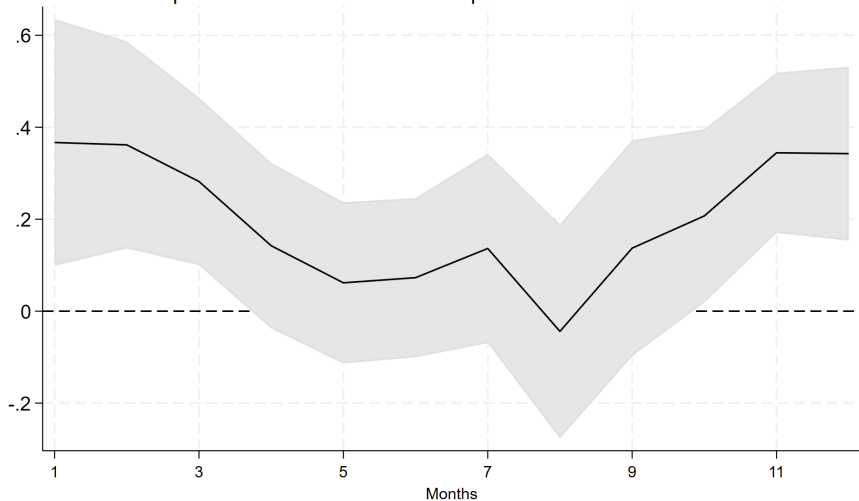
Impulse: Exchange Rate → Response: Red Meat Prices



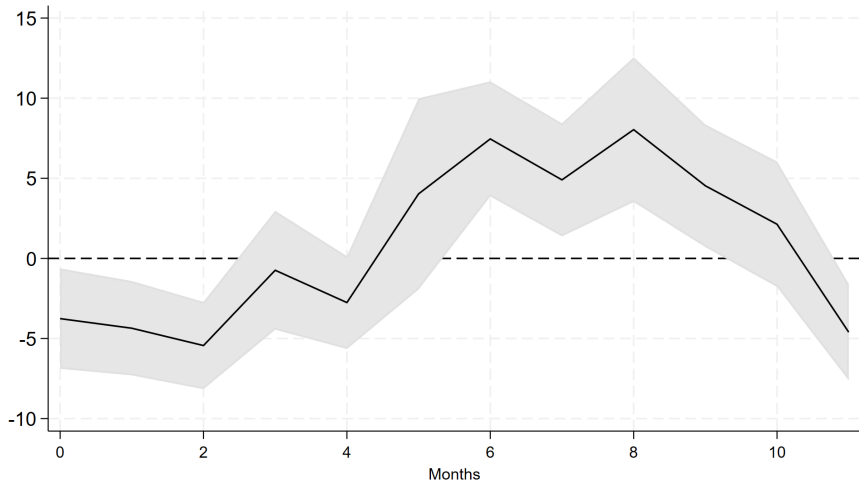
Impulse: Global Meat Price Index → Response: Red Meat Prices



Impulse: Red Meat Prices → Response: Red Meat Prices



Eid → Red Meat Prices



Dynamic multipliers from Ipirf output

Findings:

- Live cattle & red meat imports do not have a significant effect on growth rate of domestic meat prices
- Expectations?
- Exchange rates and global meat prices have only a small delayed effect
- Eid (Sacrifice Holiday) significantly effects the growth rate of domestic meat prices

Thank you!

Contact

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Figure 7: Lag Selection

Lag-order selection criteria

Sample: 2018m2 thru 2025m10

Number of obs = 93

Lag	LL	LR	df	p	FPE	AIC	HQIC	SBIC
0	-2191.17				2.2e+13	47.767	48.0969	48.584
1	-1866.45	649.42	36	0.000	4.5e+10*	41.5582	42.2839*	43.3555*
2	-1833.94	65.027	36	0.002	5.0e+10	41.6331	42.7547	44.4108
3	-1798.02	71.847	36	0.000	5.2e+10	41.6348	43.1522	45.3928
4	-1772.69	50.651	36	0.053	7.0e+10	41.8644	43.7776	46.6028
5	-1742.78	59.827	36	0.008	8.8e+10	41.9952	44.3043	47.714
6	-1706.23	73.094	36	0.000	1.0e+11	41.9835	44.6884	48.6826
7	-1675.31	61.84	36	0.005	1.4e+11	42.0927	45.1935	49.7722
8	-1640.98	68.663	36	0.001	2.0e+11	42.1286	45.6252	50.7885
9	-1596.5	88.959	36	0.000	2.6e+11	41.9463	45.8387	51.5865
10	-1558.66	75.679	36	0.000	4.7e+11	41.9067	46.195	52.5273
11	-1480.12	157.08	36	0.000	4.6e+11	40.9919	45.676	52.5928
12	-1355.85	248.54*	36	0.000	2.7e+11	39.0936*	44.1736	51.6749

* optimal lag

Impulse: Interest Rate → Response: Red Meat Prices

