



TÜRKİYE CUMHURİYET
MERKEZ BANKASI

CHALLENGES IN READING MACROECONOMIC DATA IN TÜRKİYE

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Governor

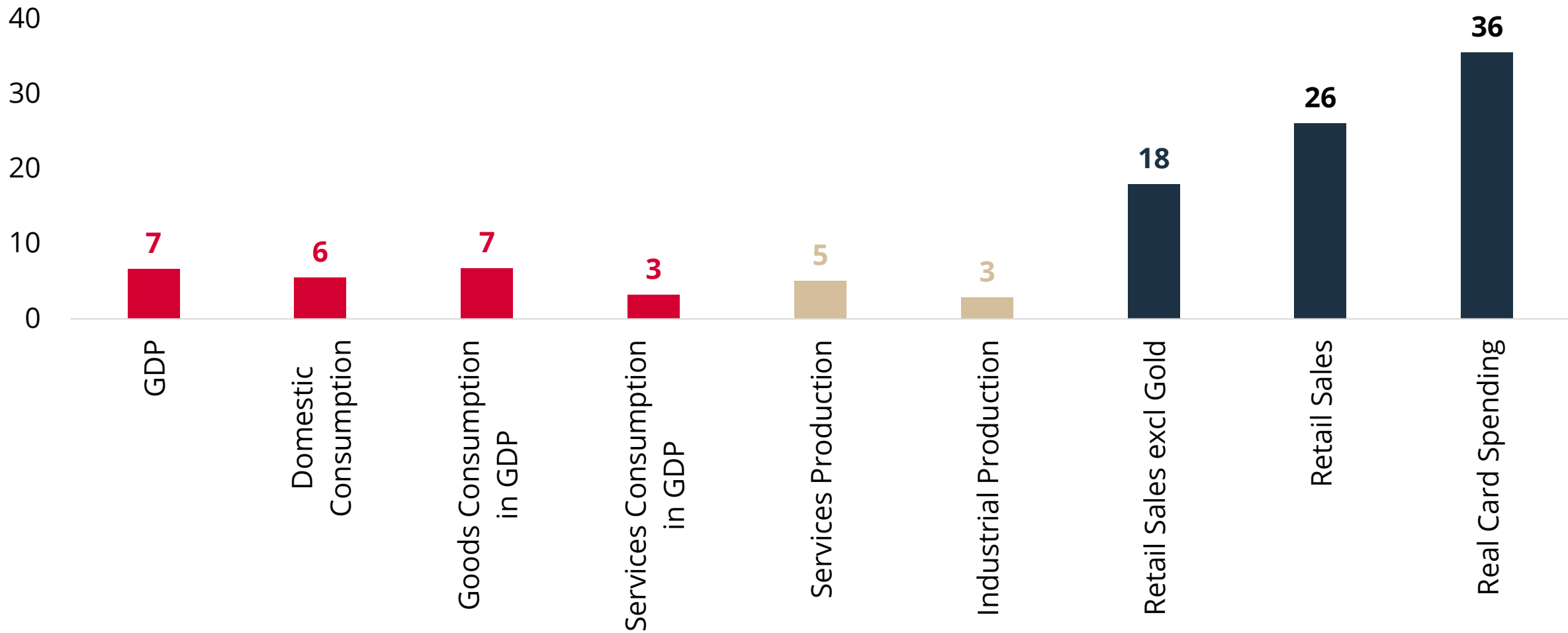
October 15, 2025

WASHINGTON, DC



Data sources differ regarding the strength of economic activity.

Demand indicators (Seasonally adjusted % change between 2023Q2 and 2025Q2)



Source: TURKSTAT, CBRT.
Last observation: 2025Q2

Shift from informal to formal economy

Drivers

- Fight against tax evasion
- Highest denomination kept small

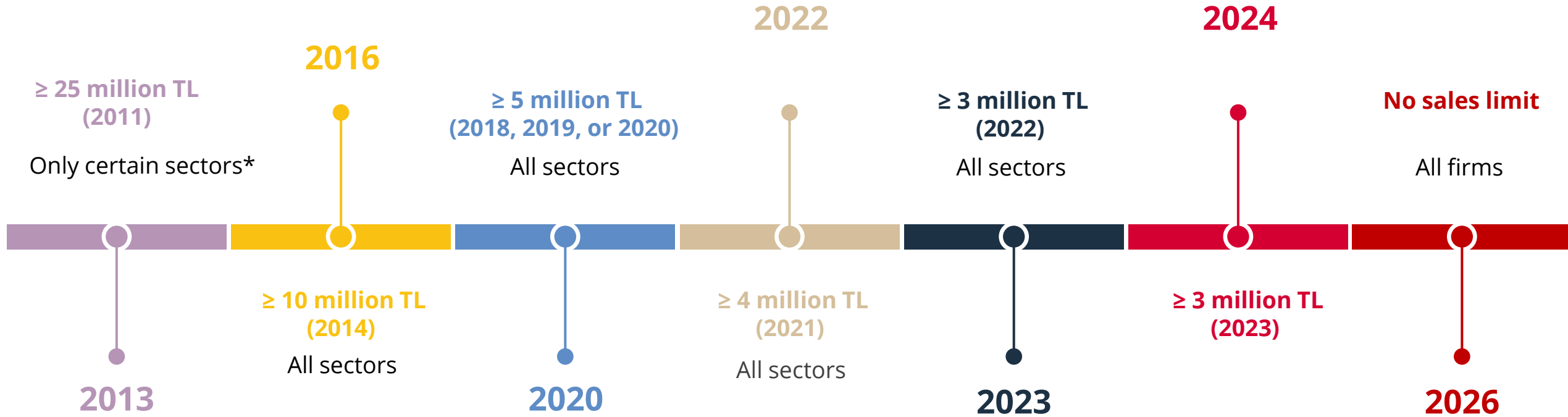
Effects

- Digitalization (increase in e-invoicing)
- Increasing use of (credit) cards as a payment tool

Implications

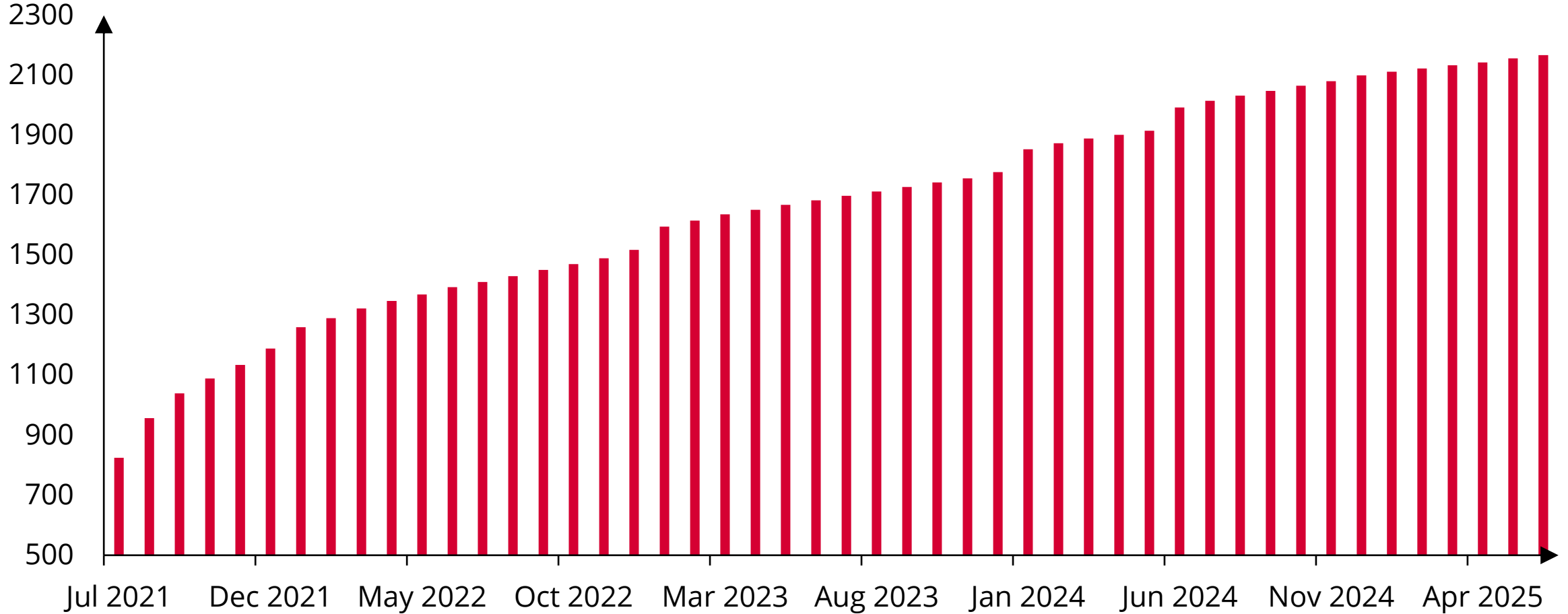
- More reporting of activity
- Harder to interpret macro data
- Headlines tend to overstate economic activity (credit, retail sales etc.).

Chronology of e-invoice implementation



Number of e-invoicing firms almost tripled.

Number of e-invoice adopters* (In thousands)



Source: CBRT estimates.

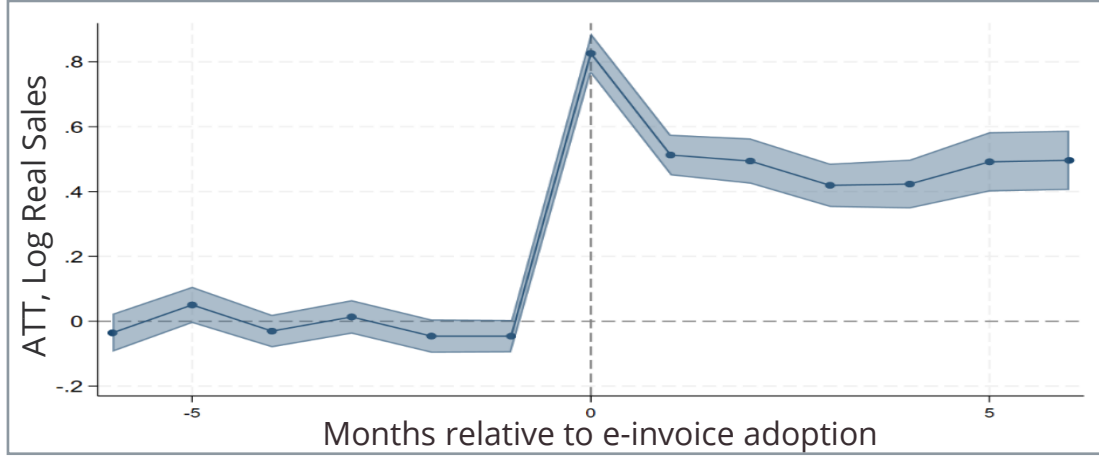
Last observation: June 2025

*The chart starts in July 2021, when e-invoice reporting data first become available. Firms that had submitted e-invoice sales records by that date are classified as adopters of e-invoice system.

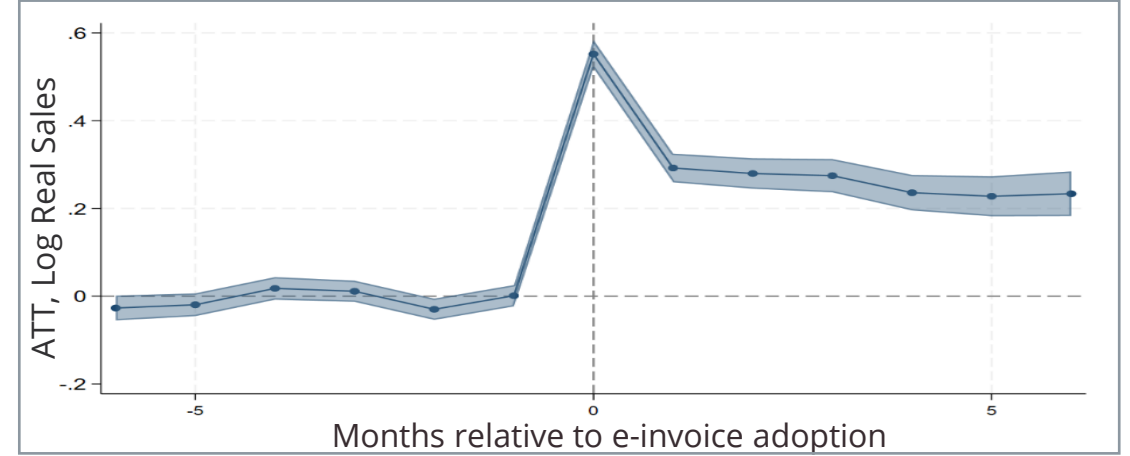
E-invoicing increased reported sales in all sectors.

The impact of e-invoice adoption on sales volume

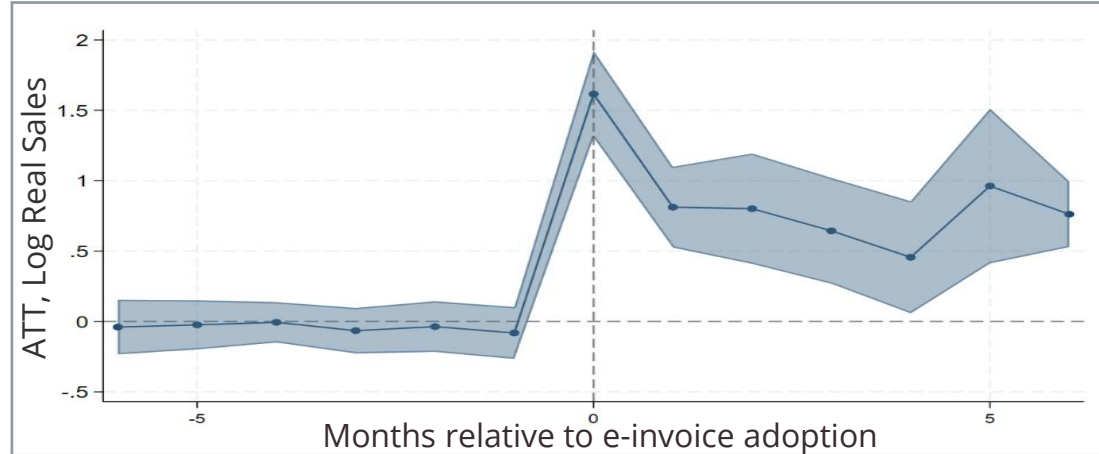
Manufacturing



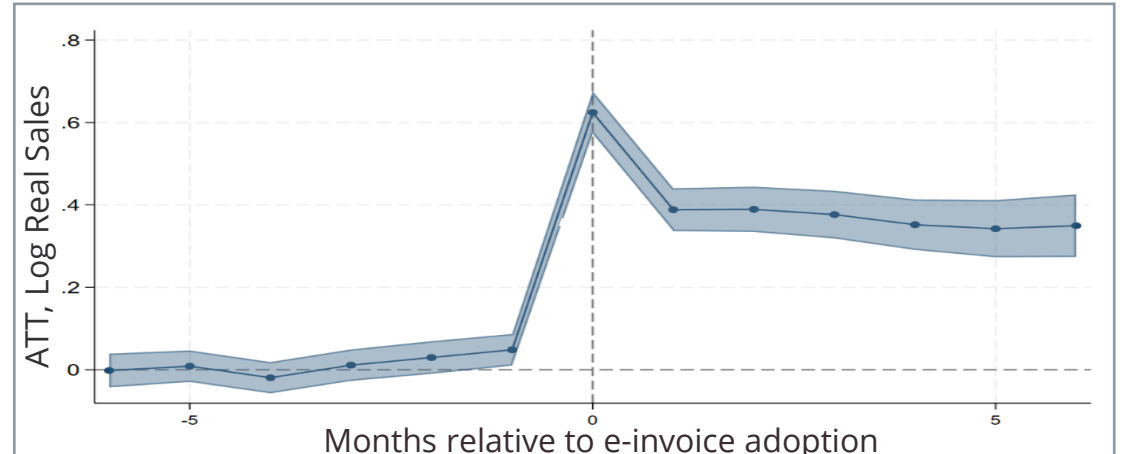
Trade



Construction

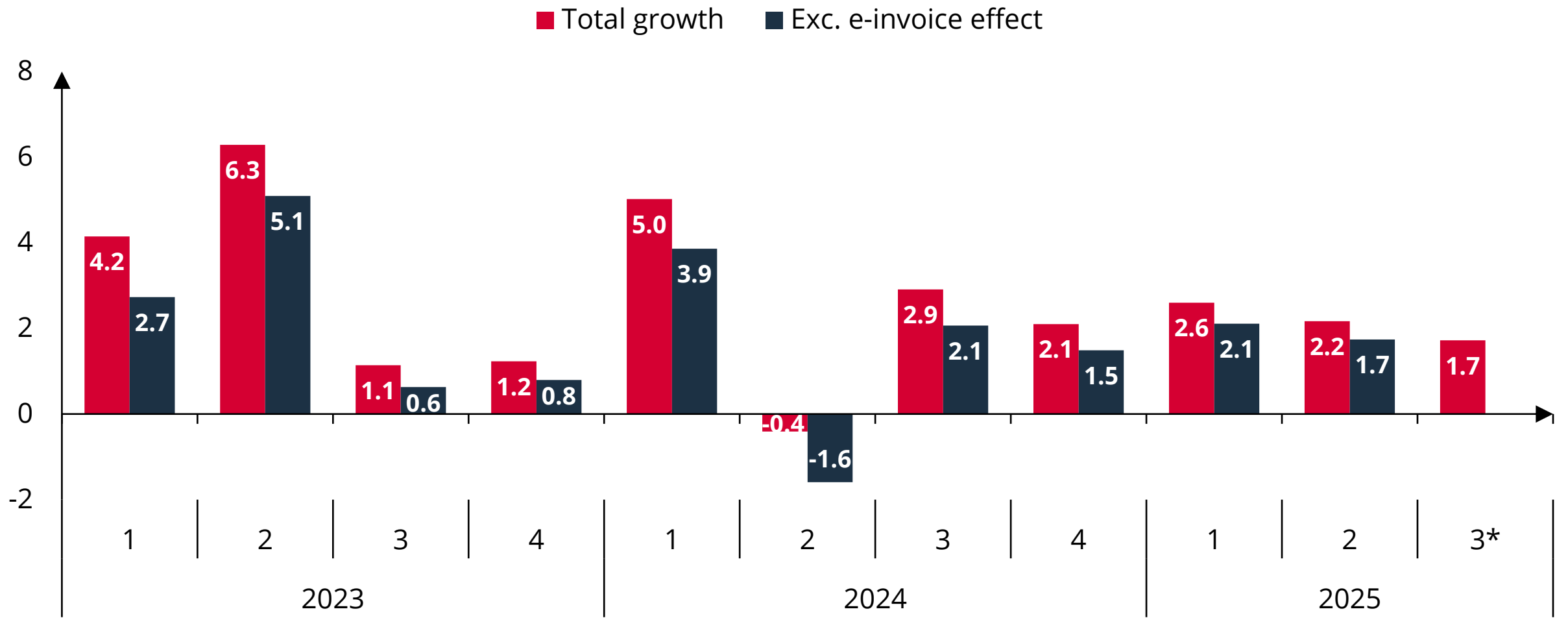


Services



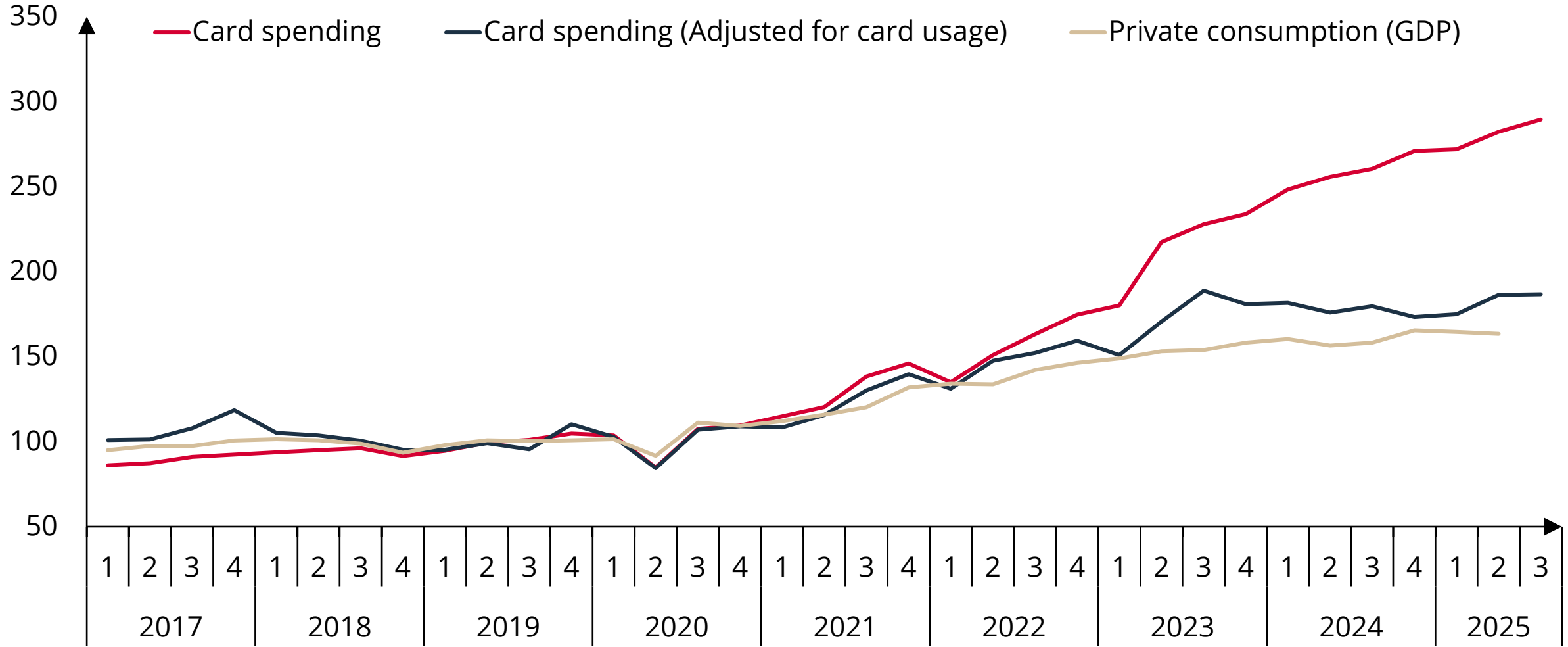
E-invoicing is overstating the strength of consumer demand in recent quarters.

Decomposition of retail sales growth* (QoQ, seasonally adjusted, %)



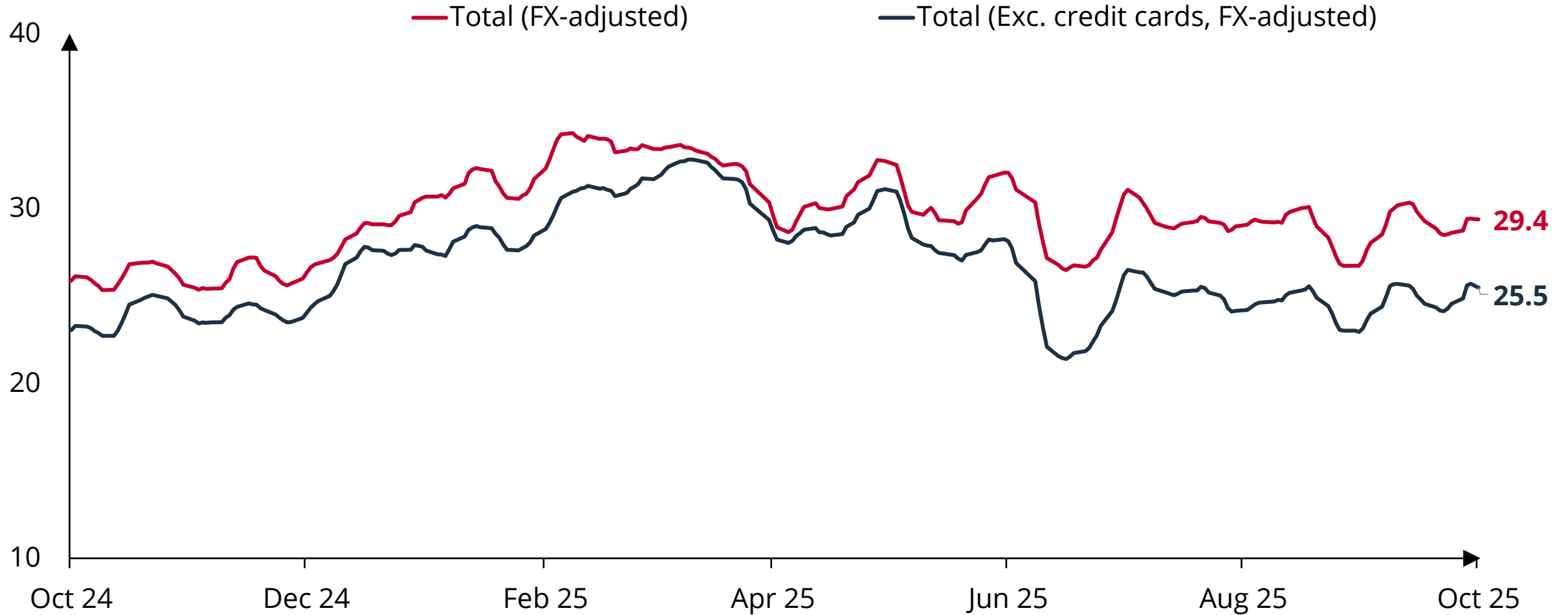
Adjusted for payment, card spending is in tandem with private consumption.

Card spending* (Real, seasonally adjusted, 2019=100)



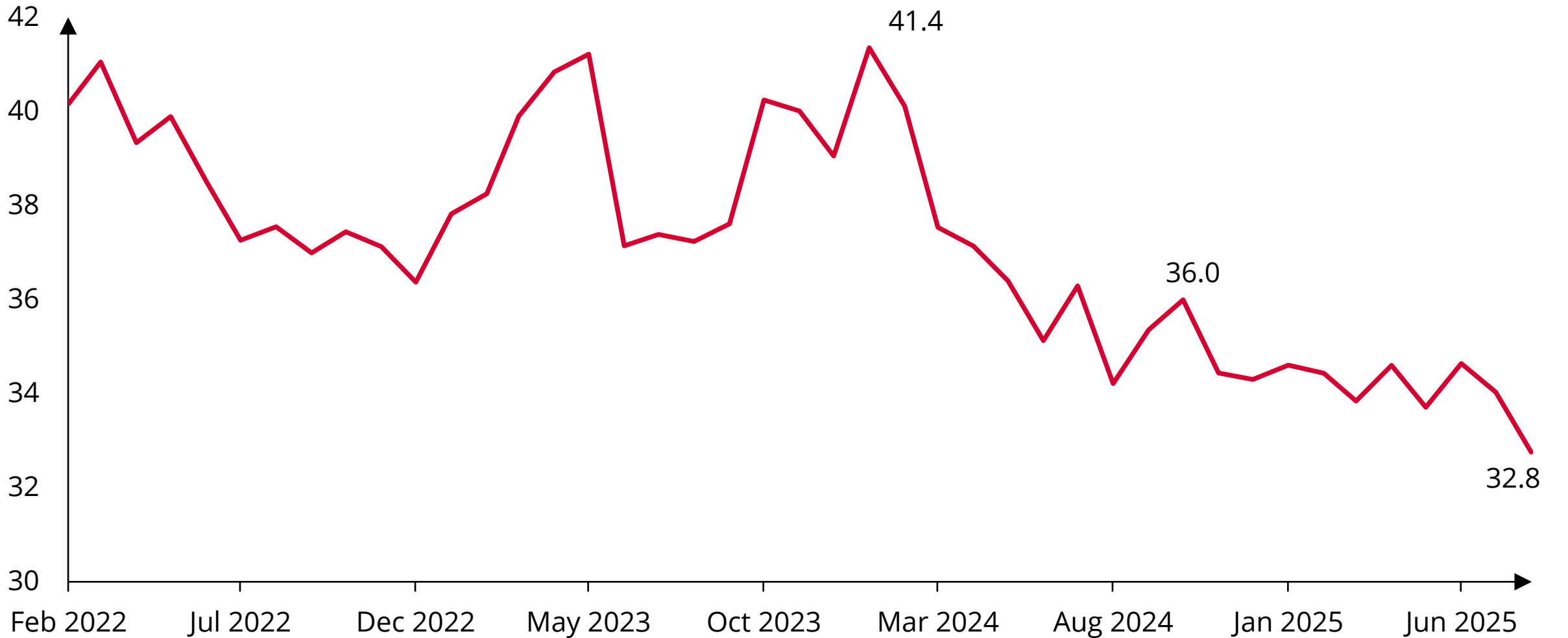
Loan growth excluding credit card balances remained stable.

Loan growth (13-week, annualized, 5-day average, %, FX-adjusted)



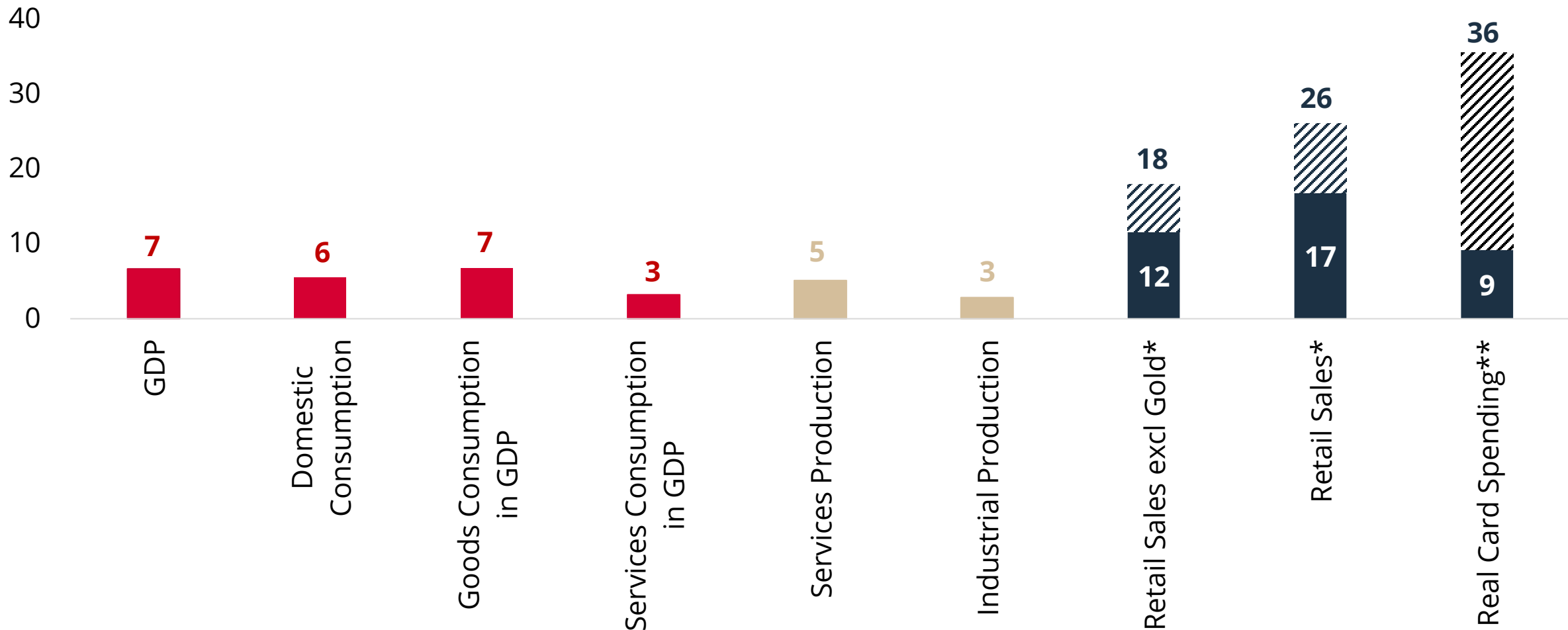
Credit card borrowing is declining.

Share of interest bearing PCC balance (%)



Data sources differ regarding the strength of economic activity.

Demand indicators (Seasonally adjusted % change between 2023Q2 and 2025Q2)



Source: TURKSTAT, CBRT.
Last observation: 2025Q2
*E-invoice effect excluded.
**Payment behavior adjusted.

Conclusions

- Data sources differ regarding the strength of economic activity.
- The shift towards digitalization blurs various data releases and makes reading macroeconomic data more challenging.
- We monitor a broad range of indicators to make robust real-time inference.
- Put together, economic activity and demand indicators point to a continued moderation.
- The tight monetary policy stance, which will be maintained until price stability is achieved, will strengthen the disinflation process through demand, exchange rate, and expectation channels.
- We will not allow demand conditions to disrupt the disinflation process.



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