GULISTAN STATE UNIVERSITY
Faculty of Digital Economy and Innovations • Department of Economics

LECTURE 5

The Central Bank and Monetary Policy Instruments

Subject: Banking and Financial Markets

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5.1

The Central Bank: Origin, Status and Functions

From the first central banks to the CBU

1668

Sveriges Riksbank – the oldest central bank

1694

Bank of England; later the lender of last resort

1913

US Federal Reserve System created

1991

Central Bank of the Republic of Uzbekistan established

1998

European Central Bank begins operating

Bagehot's rule: in a panic, lend freely to solvent banks, against good collateral, at a penalty rate. Today the CBU operates under Law No. ZRU-582 of 11 November 2019.

Core functions of a central bank

1 Issuer of currency

Monopoly on issuing banknotes and coins of the national currency.

2 Monetary authority

Sets the policy rate and manages liquidity to keep prices stable.

3 Banker to banks

Holds reserves, refinances banks, acts as lender of last resort.

4 Banker to government

Keeps Treasury accounts and acts as fiscal agent.

5 Regulator and supervisor

Licenses banks, sets prudential norms, inspects.

6 Reserves and payments

Manages gold and FX reserves; runs the payment system.

Central bank independence

Separating monetary decisions from short-term political pressure anchors inflation expectations. Independence is balanced by accountability and transparency.

1 **Institutional**

Legal status separate from the government; no instructions from other bodies.

2 **Personal**

Fixed terms and protected appointment of Board members.

3 **Functional**

Freedom to choose instruments; ban on direct financing of the budget.

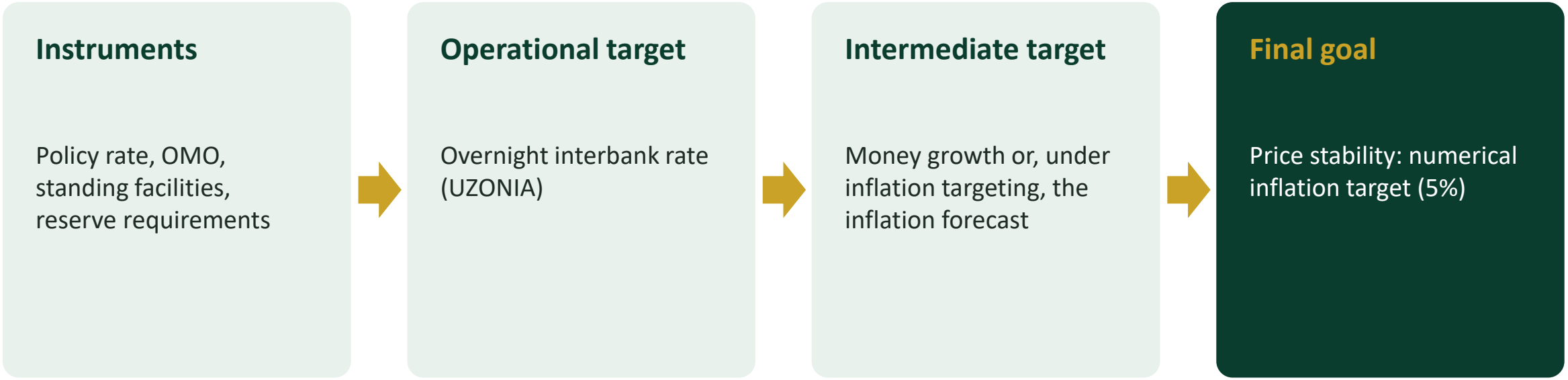
4 **Financial**

Own budget and income, not dependent on government allocations.

5.2

Goals of Monetary Policy and the Transmission Mechanism

Hierarchy of monetary policy targets



Policy affects inflation with a lag of about 6–8 quarters, so central banks act on forecasts, not on current inflation.

Channels of monetary transmission (rate increase)

Channel	Mechanism	Effect on demand and inflation
Interest rate	Higher policy rate → higher lending and deposit rates	Less borrowing and spending, more saving
Credit (bank lending)	Banks' funding costs rise, credit standards tighten	Fewer loans to households and SMEs
Exchange rate	Higher returns attract capital → currency appreciates	Cheaper imports, lower imported inflation
Asset prices	Bond and stock prices fall, wealth declines	Lower consumption and investment
Expectations	Credible policy anchors inflation expectations	More moderate wage and price setting

Real rate and the Taylor rule

Fisher equation: $r \approx i - \pi^e$

Taylor rule: $i = r^* + \pi + 0.5(\pi - \pi^*) + 0.5(y - y^*)$

r^* – *neutral real rate;* π^* – *inflation target*

$(y - y^*)$ – *output gap, % of potential GDP*

Worked example (illustrative)

$r^* = 4\%$, $\pi = 6.2\%$, $\pi^* = 5\%$, gap = +1%

$i = 4 + 6.2 + 0.5(1.2) + 0.5(1)$
$i = 11.3\%$

CBU policy rate 14% > 11.3% → deliberately tight stance.

Real rate ≈ 14 − 6.2 = 7.8%

5.3

Instruments of Monetary Policy

The central bank's toolkit

1 Policy (key) rate

Signals the stance; centre of the interest rate corridor.

2 Open market operations

Buying securities injects liquidity; selling or issuing CB bonds absorbs it.

3 Standing facilities

Overnight loans (ceiling) and deposits (floor) form the corridor.

4 Reserve requirements

A higher ratio lowers the money multiplier and lending capacity.

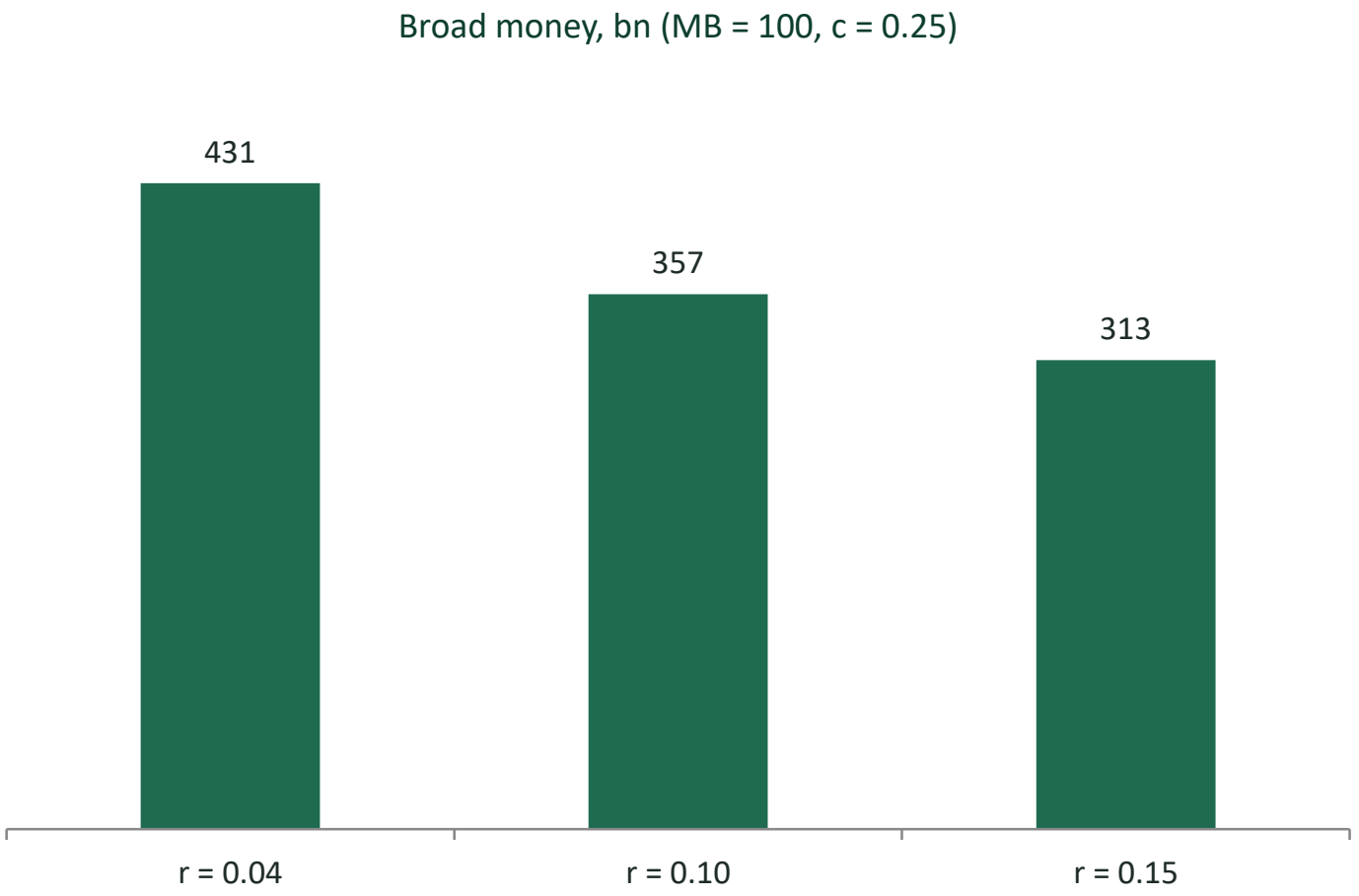
5 Forward guidance

Communication on the future path shapes long rates and expectations.

6 Administrative tools

Credit ceilings, rate controls – largely abandoned today.

Reserve requirements and the money multiplier



Illustrative calculation

$m = (1 + c) / (c + r)$
$M = m \times MB$

$r = 0.04 \rightarrow m = 4.31$
$r = 0.10 \rightarrow m = 3.57$
$r = 0.15 \rightarrow m = 3.13$

Raising r from 4% to 15% cuts potential money supply by about 27% – a powerful but blunt instrument.

Comparing the instruments

Instrument	Flexibility	Speed of effect	Advantage	Limitation
Policy rate	High	Signal now; full effect 6–8 quarters	Clear signal of stance	Weak under high dollarization
Open market operations	Very high	Immediate on liquidity	Fine-tuning, reversible	Needs deep securities market
Standing facilities	High	Immediate	Caps rate volatility	Passive, bank-initiated
Reserve requirements	Low	Slow	Strong liquidity effect	Taxes banks, blunt
Forward guidance	High	Depends on credibility	Costless	Fails if credibility is low

5.4

Inflation Targeting in Uzbekistan

CBU monetary policy stance, 2026

14%

Policy rate

kept on 16 Sep 2026

6.2%

Headline inflation

August 2026

5%

Inflation target

by end-2027

7.8%

Real policy rate

14% − 6.2%

Path to inflation targeting: FX liberalization (September 2017) → Law on the Central Bank (2019) making price stability the main objective → policy rate, corridor, published forecasts. Dollarization is falling: loans 41% → 39%, deposits 24% → 19%.

Sources: CBU (via Norma.uz, Sep 2026); CERR Banking Activity Index, Q2 2026; real rate – author's calculation

What still limits transmission in Uzbekistan

1. Large share of state-directed and preferential lending, less sensitive to the policy rate
2. High concentration: state-owned banks hold about 62% of banking assets
3. Shallow securities market limits open market operations and the asset price channel
4. Administered price liberalization (energy, utilities) creates one-off inflation shocks
5. Household and business inflation expectations fall more slowly than inflation

Conclusion

1. The central bank’s main task is price stability, pursued through the policy rate and liquidity management
2. Policy works through interest rate, credit, exchange rate, asset price and expectations channels
3. Market-based instruments (OMO, corridor) have replaced administrative controls
4. The CBU keeps a tight real rate (~7.8%) to reach the 5% target by end-2027

Review questions

1. What distinguishes a central bank from a commercial bank?
2. Explain Bagehot’s rule and the lender-of-last-resort function
3. Describe the five channels of monetary transmission
4. c = 0.2, r = 0.08, MB = 150 bn: find m and M. What if r = 0.12?
5. Taylor rule with $r^* = 3.5\%$, $\pi = 6.2\%$, $\pi^* = 5\%$, gap = −0.5%: compare with 14%

Thank you for your attention!

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