

Monetary Law and Monetary Policy

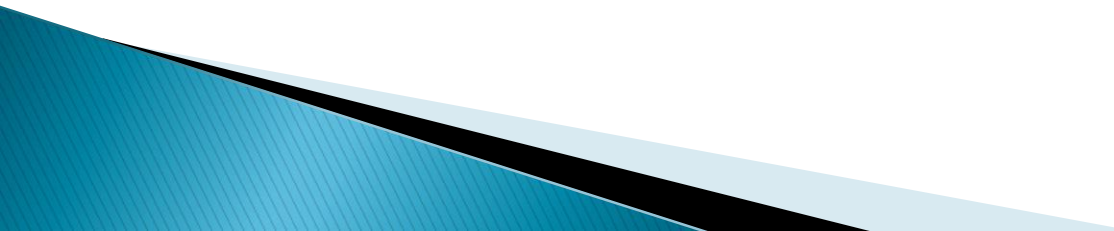
4a. Monetary policy – instruments and policies

Part 1

Dr Marek Porzycki

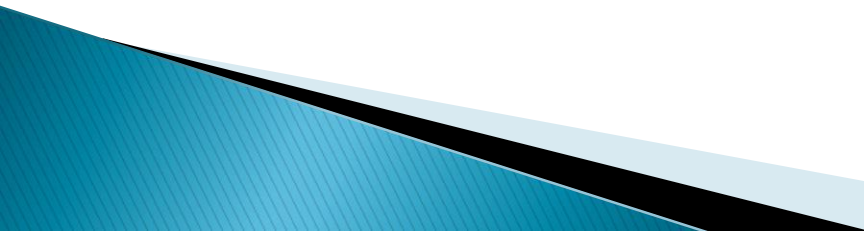


Overview

1. Basic function and purposes
 2. Approaches – restrictive vs. expansionary
 3. Monetary policy tools
 4. Transmission mechanism
 5. Unconventional tools applied during the recent crisis (in part 2)
 6. Communication of monetary policy (in part 2)
 7. Sources and reading
- 

Basic function of monetary policy

Steering the money supply

- direct influence on the monetary base (M0)
 - indirect impact on monetary aggregates (M1 and above) via the transmission mechanism
- 

Inflation targetting and its alternatives

- ▶ price stability objective
- ▶ price stability vs other goals of monetary policy
 - economic growth
 - high employment
 - stability on financial markets
- ▶ **Poland:** since 1999 the **direct inflation target strategy** has been applied in the implementation of monetary policy. The Monetary Policy Council defines the **inflation target** and then adjusts the NBP basic interest rates in order to maximise the probability of achieving the target. Since the beginning of 2004, NBP has pursued a continuous inflation target at the level of **2.5%** with a **permissible fluctuation band of +/- 1 percentage point**.

Note: legal aspects of central bank mandate will be discussed during the following courses

Expansionary vs. restrictive policy

- ▶ **Expansionary** (loose) monetary policy – expansion of the money supply
 - aiming at higher inflation (or at least accepting it)
 - stimulating economic growth
 - lower interest rates = cheaper lending
 - „doves”
- ▶ **Restrictive** (tight, contractionary) monetary policy – the money supply expands more slowly than usual or even shrinks
 - aiming to reduce inflation
 - cooling down overheated economy
 - higher interest rates = more expensive lending
 - „hawks”

Instruments of monetary policy

- ▶ **Reserve requirements (minimum reserves)**
 - the proportion of total deposits that banks must hold as reserve with the central bank.
- ▶ **Standing facilities**
 - aim to provide and absorb liquidity of banks, signal the general monetary policy stance and influence market interest rates.
- ▶ **Open market operations (OMO)**
 - buying or selling assets (usually government bonds) on the open market from commercial banks and financial institutions

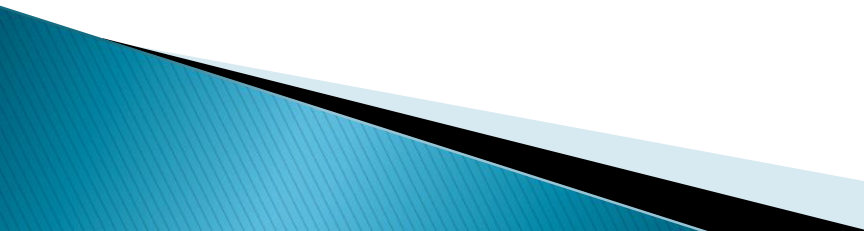
Reserve requirement

- ▶ a specified fraction of deposits kept with a commercial bank to be set aside in the central bank as mandatory reserve
- ▶ deposits set aside as reserve cannot be used to finance lending – aims:
 - limiting excess bank liquidity, putting upper limit on the money multiplier
 - smoothing out the impact of movements in banking sector liquidity on interbank interest rates
- ▶ Current values (as of 24.10.2023):
 - Poland: 3,50 % minus 500.000 EUR per credit institution,
 - euro area: 1% minus 100.000 EUR per institution

Reserve requirement – example

- ▶ Starting from 18.01.2012, the ECB has lowered the reserve requirement from previous 2% to 1% as one of measures intended to support bank lending (→ expansionary monetary policy)
- ▶ press release:
http://www.ecb.europa.eu/press/pr/date/2011/html/pr111208_1.en.html
- ▶ However, this move did not reach its intended goal, as commercial banks preferred to deposit excess reserves at the ECB using the deposit facility.

Standing facilities (credit–deposit operations)

- ▶ SF are aimed at **providing and absorbing** overnight liquidity, **signal** the general stance of monetary policy and **influence overnight market interest rates**
 - ▶ Central bank acts as „bank of banks” **taking deposits** and **extending loans** to commercial banks.
 - ▶ „standing” = can be used on the commercial banks’ initiative
 - ▶ Credit–deposit operations serve to limit fluctuations of the shortest (especially overnight) interbank market rates
- 

Standing facilities – lending

- ▶ primary credit or regular short-term lending (usually overnight)
 - Eurosystem: **marginal lending facility**, banks obtain overnight liquidity from the NCBs against eligible assets
 - Fed: discount window
 - NBP: **lombard loans** (*kredyt lombardowy*) extended to banks against Treasury securities as collateral, in order to cover their short-term liquidity shortfalls.
 - ▶ in usual conditions interest rate applied to central bank lending sets a **ceiling** on interbank interest rates
 - ▶ current rates (24.10.2023): 4,75% (ECB), 6,25% (NBP)
 - ▶ to be distinguished from secondary lending or liquidity support
- see below, unconventional tools

Standing facilities – deposits

- ▶ short-term (overnight) deposits with the central bank, available to commercial banks
- ▶ Time deposits at the central bank allow commercial banks to manage their surplus liquidity, preventing short-term interbank market interest rates from falling below the deposit rate.
- ▶ Interest rate on overnight deposits **sets floor** to interbank lending rates, as the deposit facility allows banks to „park” any amount of money at the central bank at the deposit rate
- ▶ Deposit rate is the lowest of central bank interest rates. Current ECB interest rate on deposit facility (as of 24.10.2023): 4,00% (→ until July 2022: **negative interest rate**)
- ▶ Corresponding NBP rate: 5,25%

[*Negative interest rates*]

- ▶ **Aim:** to encourage banks to boost lending to each other, to consumers, and to businesses, in turn boosting the broader economy, while discouraging hoarding liquidity
 - instead of earning interest on money deposited with the central bank, banks **are charged** by the central bank to park their cash with it
- ▶ **But:** the consequences may be unwelcome:
 - banks can **pass on to customers** the costs they incur for depositing money with the central bank
 - negative return on parking funds with the central bank might encourage banks to invest in **riskier assets** to secure a return, potentially driving **new asset bubbles**
 - banks are likely to increase their purchases of government bonds → government borrowing costs are artificially low → banks and governments could find themselves so intertwined and interdependent that they drag each other – and the economy – down; **crowding out** effect may occur
 - Experience of "early adopters" in Sweden and Denmark (no noticeable change in the interest rates charged by banks for bank loans)

Open market operations

- ▶ initiated by the central bank
- ▶ **Basic form:** purchases or sales of assets (mostly Treasury bonds) from financial institutions
- ▶ **Purchases of assets** → expansion of monetary base, providing liquidity
- ▶ **Sales of assets** → shrinking of monetary base, absorbing liquidity
- ▶ Dynamic vs. defensive open market operations
 - Defensive OMO: in response to or in anticipation of other market events
- ▶ Repos (repurchase agreements) and reverse repos – purchases/sales reversed on a specified time, subject to specified interest rate
- ▶ Outright transactions (purchase/sale without an agreement to reverse the transaction)

Open market operations 2

- ▶ Other instruments used – collateralised loans, issuance of debt certificates by the central bank, swaps, fixed-term deposits
 - NBP: issue of own-debt securities (7-day NBP **money market bills**), whose minimum yield (interest rate) equals the **reference rate** adopted by the Monetary Policy Council.
- ▶ Difference in aims and regularity (Eurosystem examples):
 - main refinancing operations: liquidity-providing transactions with a weekly frequency and a maturity of normally one week
 - long-term refinancing operations (LTRO and TLTRO – transactions with maturities of, respectively, up to 3 months and up to 4 years, see also unconventional monetary policy)
 - fine-tuning operations (conducted on an ad hoc basis in order to smooth the effects on interest rates caused by unexpected liquidity fluctuations in the market)
 - structural operations, e.g. the issuance of debt certificates

Eligible collateral

- ▶ Lending by central banks should be based on adequate collateral (assets submitted by commercial banks as security).
- ▶ Treasury bonds and other marketable assets (e.g. credit claims) are usually used as collateral.
- ▶ Lombard loans extended by the Polish NBP: collateral consists of Treasury securities and the amount of loan may not exceed 80% of their nominal value
- ▶ Central banks maintain a list of eligible collateral and update it from time to time (see <https://www.ecb.europa.eu/paym/coll/html/index.en.html>)
- ▶ Risky collateral, e.g. bonds with lower credit risk rating, may be eligible under certain circumstances but valuation haircuts may be applied to reflect higher risk.

Example: use of Greek sovereign bonds as collateral for Eurosystem monetary policy operations during the crisis after 2010

Eligible counterparties

- ▶ Institutions allowed to contract with the central bank within the monetary policy framework.
- ▶ Broadly: commercial banks and similar institutions.
- ▶ Eurosystem eligibility criteria – eligible institutions should be:
 - subject to minimum reserve requirement
 - in financially sound condition
 - subject to financial supervision by competent authorities
 - fulfilling operational criteria

Central bank interest rates

- ▶ Interest rates applied by central banks to the respective monetary policy instruments
- ▶ Announced by the central banks and changed in reaction to monetary policy needs:
 - rate increase – tightening the monetary policy, aimed at reduction of the money supply
 - rate decrease – easing the monetary policy, aimed at expansion of the money supply
- ▶ Influence on conditions on the money market (interbank market and transactions between banks and the general public) and in the general economy *via* the **transmission mechanism**.

Central bank interest rates

- ▶ Examples:

ECB

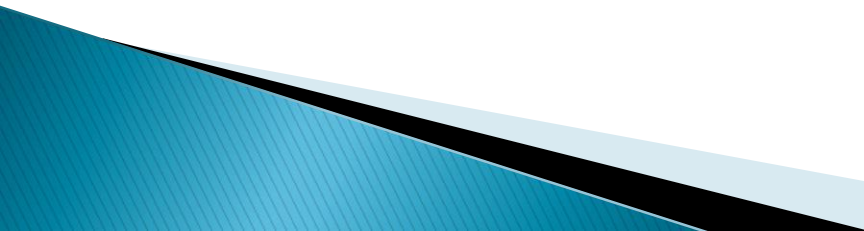
<https://www.ecb.europa.eu/mopo/implement/sf/html/index.en.html>

https://www.ecb.europa.eu/stats/policy_and_exchange_rates/key_ecb_interest_rates/html/index.en.html


NBP

<https://nbp.pl/en/monetary-policy/mpc-decisions/interest-rates/>


Assessment of the respective monetary policy tools

- ▶ **Reserve requirements** – useful as a limit of possible money creation but not suitable for rapid changes in answer to changing conditions on the market.
 - ▶ **Standing facilities** – useful to influence interest rates on the market but not suitable for reacting to daily fluctuations.
 - ▶ **Open market operations** – more flexible, initiated by the central bank at any time and with any volume needed. Easily reversible.
- 

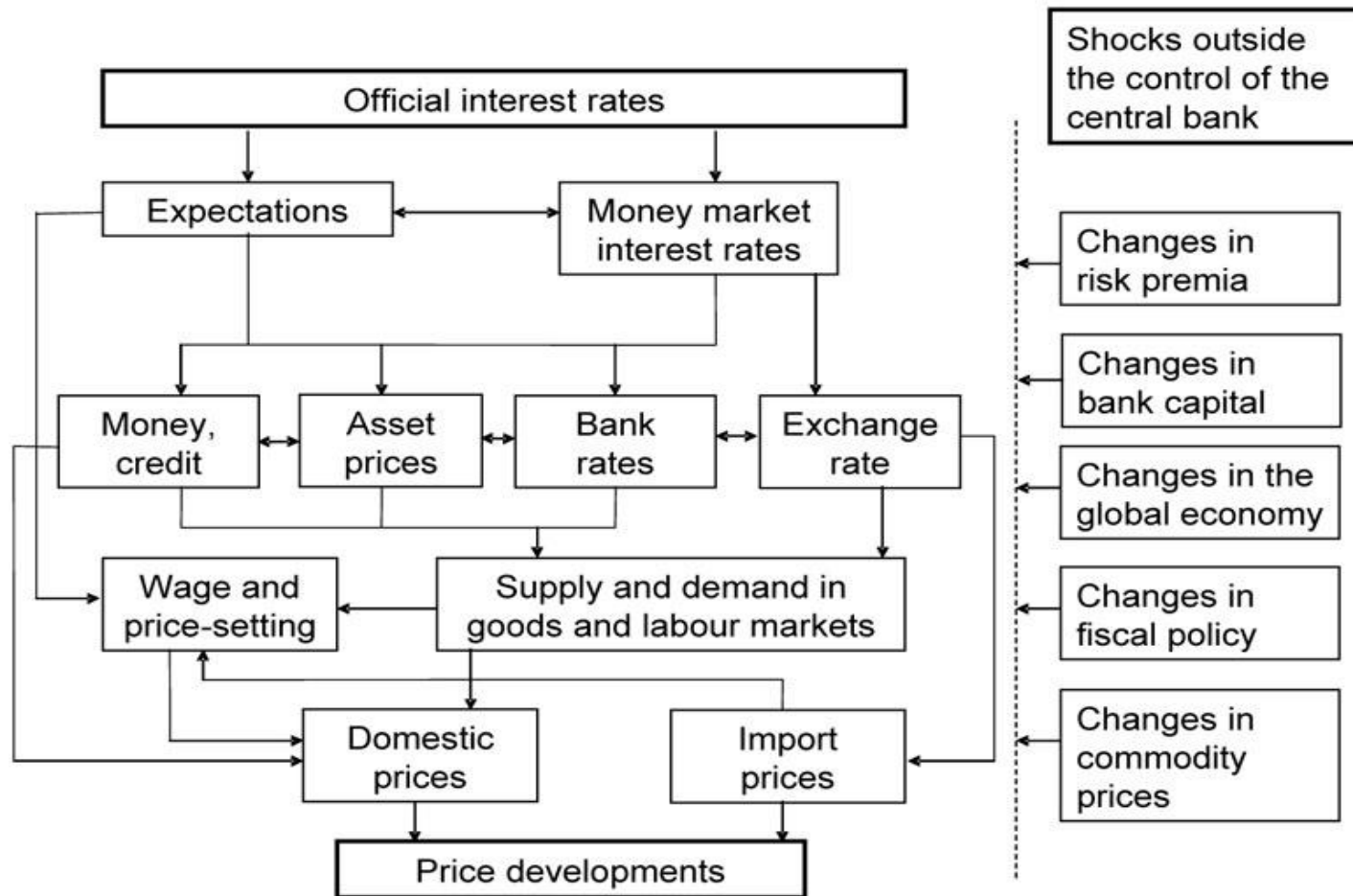
„Policy mix”

- ▶ combination of the monetary policy and the fiscal policy, as two channels influencing growth and employment
 - ▶ They are generally determined, respectively, by the central bank and the government
 - ▶ Monetary and fiscal policies affect each other, and the right policy mix is supposed to achieve desirable macroeconomic outcomes such as price stability, credit availability, economic growth and financial stability
 - ▶ An example of a policy mix would be tight monetary policy combined with easy fiscal policy.
- 

Transmission mechanism

- ▶ **Function of „bank of banks”** → central banks deal directly only with commercial banks but not with the general public.
 - ▶ Proper functioning of the monetary policy requires **transmission of measures** taken by the central bank through commercial banks to the real economy.
 - ▶ **Transmission channels** include credit and deposit businesses of the commercial banks, asset prices, currency exchange rates and indirectly also wage and price–setting resulting from supply and demand of goods, services and labour.
 - ▶ Transmission mechanism is affected by events **beyond control of the central bank**, such as global economic developments, commodity prices, political events etc.
- 

Transmission mechanism 2



► Source: ECB,

<http://www.ecb.europa.eu/mopo/intro/transmission/html/index.en.html>

Transmission mechanism 3

- ▶ Specific problems with transmission of expansionary monetary policy in **periods of recession**.
- ▶ „Zero interest rate policy” („ZIRP”) and negative interest rates.
 - ZIRP: the central bank maintains a 0% nominal interest rate.
 - central bank is no longer able to reduce nominal interest rates
- ▶ **Liquidity trap**: injections of cash into the private banking system by a central bank fail to decrease interest rates and hence make monetary policy ineffective
 - A liquidity trap is caused when people hoard cash because they expect an adverse event such as deflation, insufficient aggregate demand, or war.
 - Japan: the economy fell into a period of prolonged stagnation despite near-zero interest rates

Transmission mechanism 4

- ▶ Expanding the monetary base does not increase money supply as long as banks do not start credit expansion.
- ▶ Monetary policy alone is not able to kick-start economic growth.
 - Central banks can *encourage* money creation, but they cannot *force* commercial banks to extend credit
 - money cannot be pushed from the central bank to borrowers if they do not wish to borrow
- ▶ compared to „**pushing on a string**”
 - monetary policy is asymmetric → it is easier to tighten it, stopping an expansion, than to ease it in order to stop a contraction

Additional reading and reference materials (to presentations 4a and 4b)

- ▶ F. Mishkin, The Economics of Money, Banking, and Financial Markets, Pearson, 13th ed. 2022
 - monetary policy tools, p. 416–432
 - price stability and other goals: Chapter 17, p. 435–463
- ▶ ECB website
 - <https://www.ecb.europa.eu/mopo/html/index.en.html>
 - <https://www.ecb.europa.eu/mopo/decisions/html/index.en.html>
- ▶ NBP website
 - <https://nbp.pl/en/monetary-policy/>
- ▶ Fed website
 - <https://www.federalreserve.gov/monetarypolicy.htm>
- ▶ For Polish readers: A. Sławiński (red.), Polityka pieniężna, Warszawa 2011

ECB General Documentation

- ▶ most comprehensive and detailed description of the Eurosystem monetary policy
- ▶ set in the ECB Guideline (EU) 2015/510 of 19 December 2014 on the implementation of the Eurosystem monetary policy framework (ECB/2014/60), as amended

available on EUR-Lex, latest consolidated version: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A0201400060-20230629>