



Queen Mary  
University of London

# Macro for Policy

Monetary Policy in Practice

Lecturer: Dr. Tatsuro Senga  
School of Economics and Finance

# Agenda

- 1. Nuts and bolts (payment system, interbank market, open market operations)**
- 2. Monetary policy before the Financial Crisis**
- 3. Monetary policy after the Financial Crisis**

# Part 1

1. Goal and tool
2. Reserves
3. Bank rate



BANK OF ENGLAND

# Monetary Policy Summary and minutes of the Monetary Policy Committee meeting ending on 17 March 2021

**Publication date: 18 March 2021**

# MPC

## Monetary Policy Summary, March 2021

The Bank of England's Monetary Policy Committee (MPC) sets monetary policy to meet the 2% inflation target, and in a way that helps to sustain growth and employment. At its meeting ending on 17 March 2021, the Committee judged that the existing stance of monetary policy remains appropriate. The MPC voted unanimously to maintain Bank Rate at 0.1%. The Committee voted unanimously for the Bank of England to maintain the stock of sterling non-financial investment-grade corporate bond purchases, financed by the issuance of central bank reserves, at £20 billion. The Committee voted unanimously for the Bank of England to continue with its existing programme of UK government bond purchases, financed by the issuance of central bank reserves, maintaining the target for the stock of these government bond purchases at £875 billion and so the total target stock of asset purchases at £895 billion.

# Target

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# Voting

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# Bank Rate

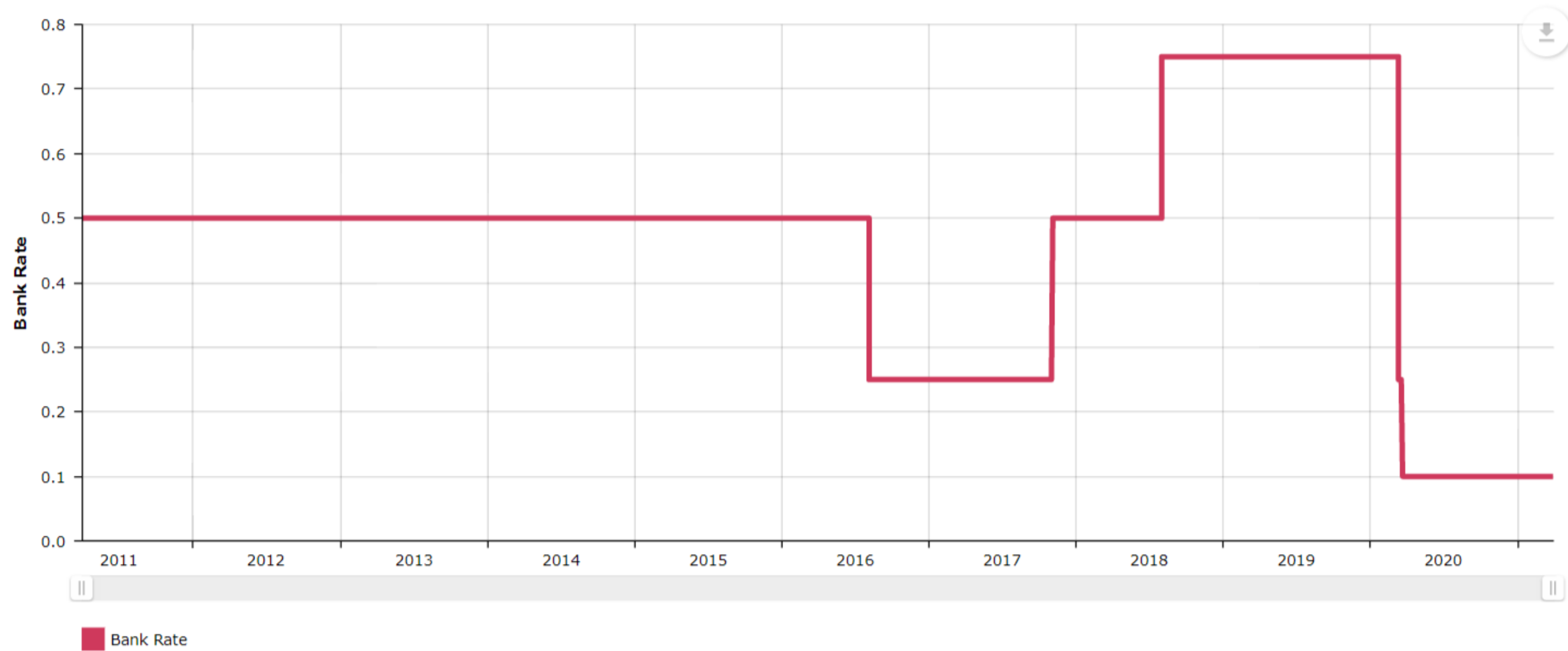
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# Bank Rate

## Official Bank Rate



# Asset Purchase

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# Reserves

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# Monetary policy and central bank liabilities

*“Everything – and I mean everything – about central banking stems from our liabilities being the base money of the economy. From this flow our roles in monetary policy and financial stability. And, in consequence, the manner in which central banks supply our money – overnight, intra-day, and for term maturities; in routine and in various stressed circumstances – just could not matter more, even if much of the time it seems like an obscure corner of the financial system’s plumbing.”* (Paul Tucker, 2009 in Tokyo)



# Central bank money

<i>Liabilities</i>	<i>Assets</i>
Banknotes	
Reserves held by commercial financial institutions	
Capital	

Central bank issues liabilities to be used as money.

Banks hold **reserves** in accounts with central bank.

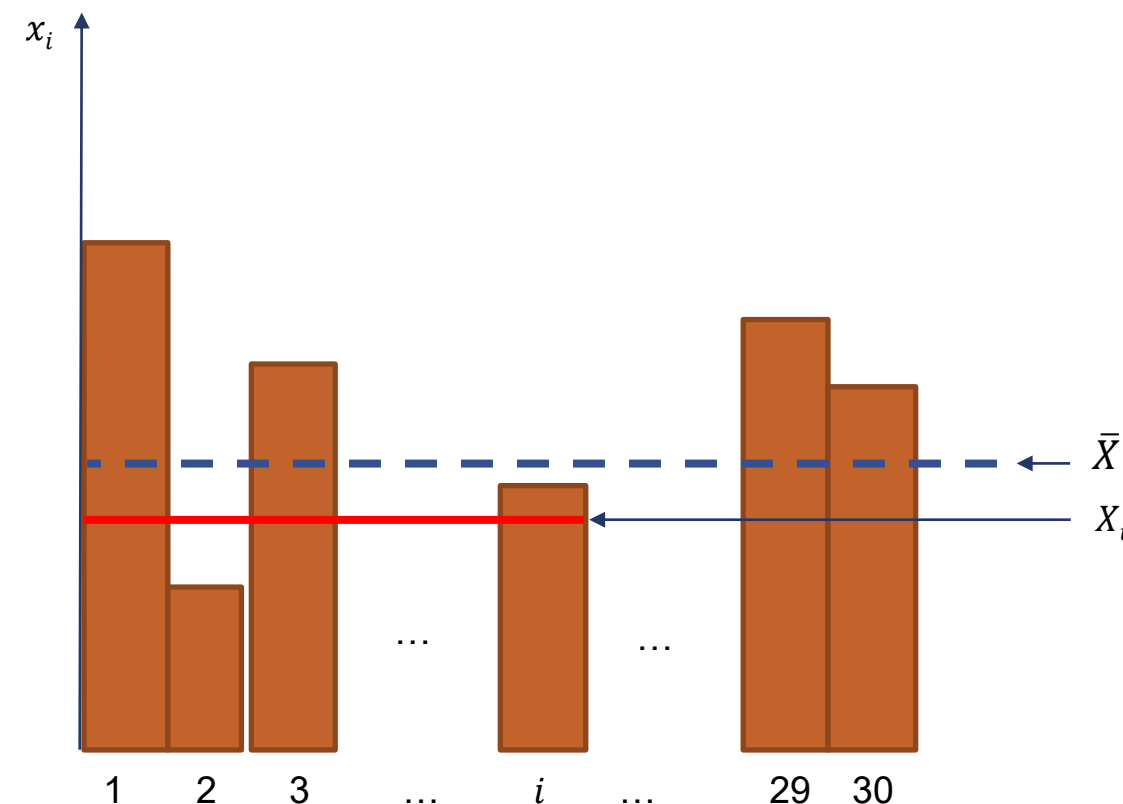
1. for payments with other banks
2. for payments with the government (e.g. tax and transfer)
3. for payments with the Bank of England (e.g. open market operations)

## Part 2

1. Reserve averaging scheme
2. Determination of interbank market rates

# Reserves-averaging scheme

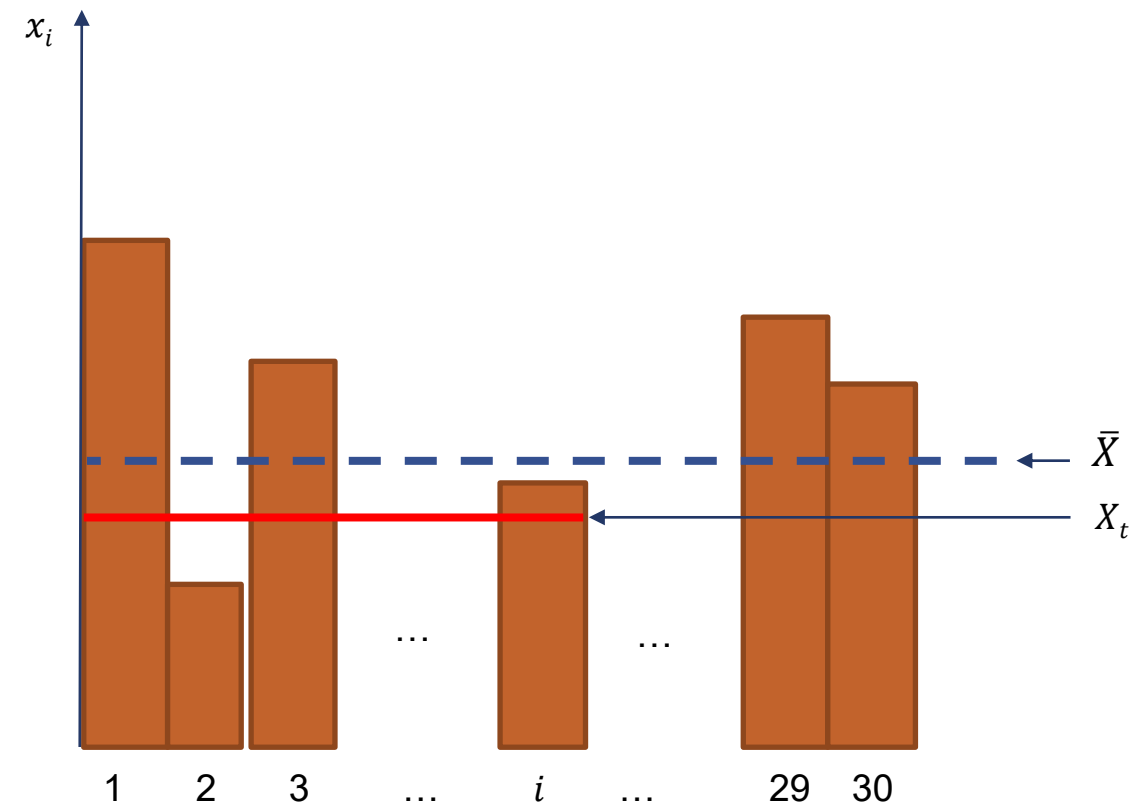
- Banks choose a level of reserves they wish to target **on average** over maintenance periods running between Monetary Policy Committee meetings.
- Those holdings are *remunerated at the official **Bank Rate*** if the average balance over the maintenance period is within a small range around their target.
- Banks will be charged if those holdings are on average outside the target range.



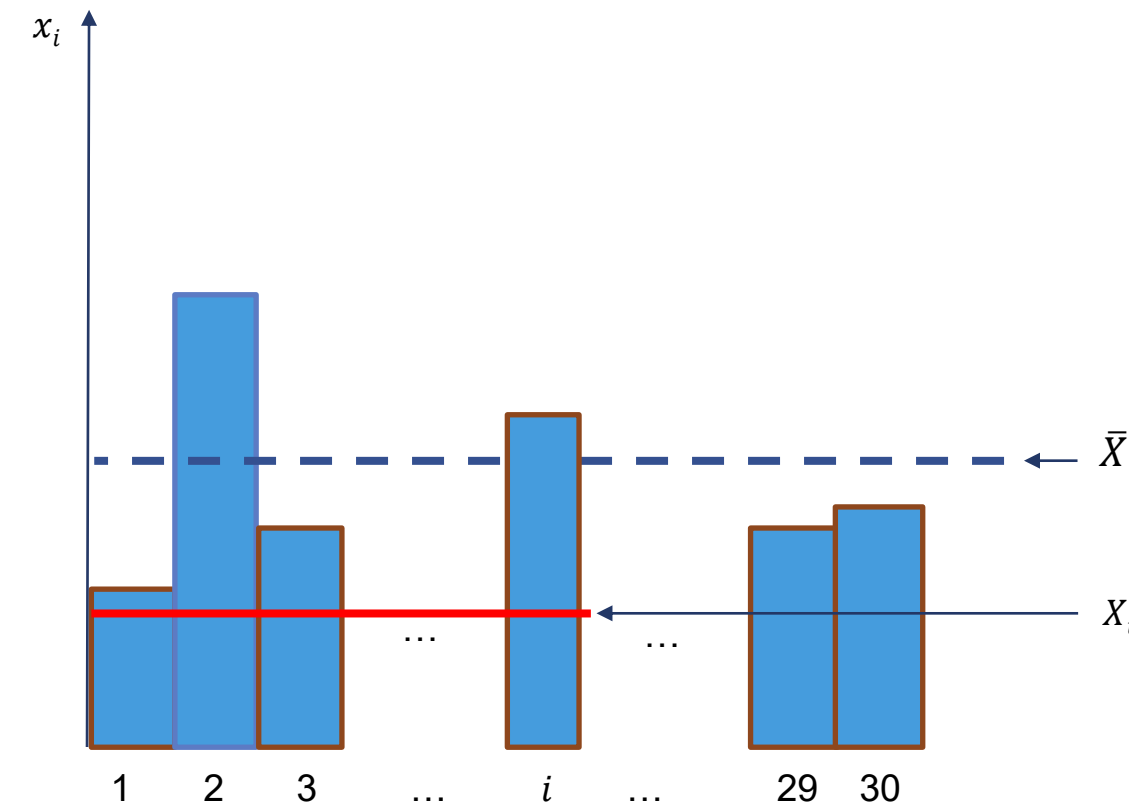


# Interbank money market

- Bank A



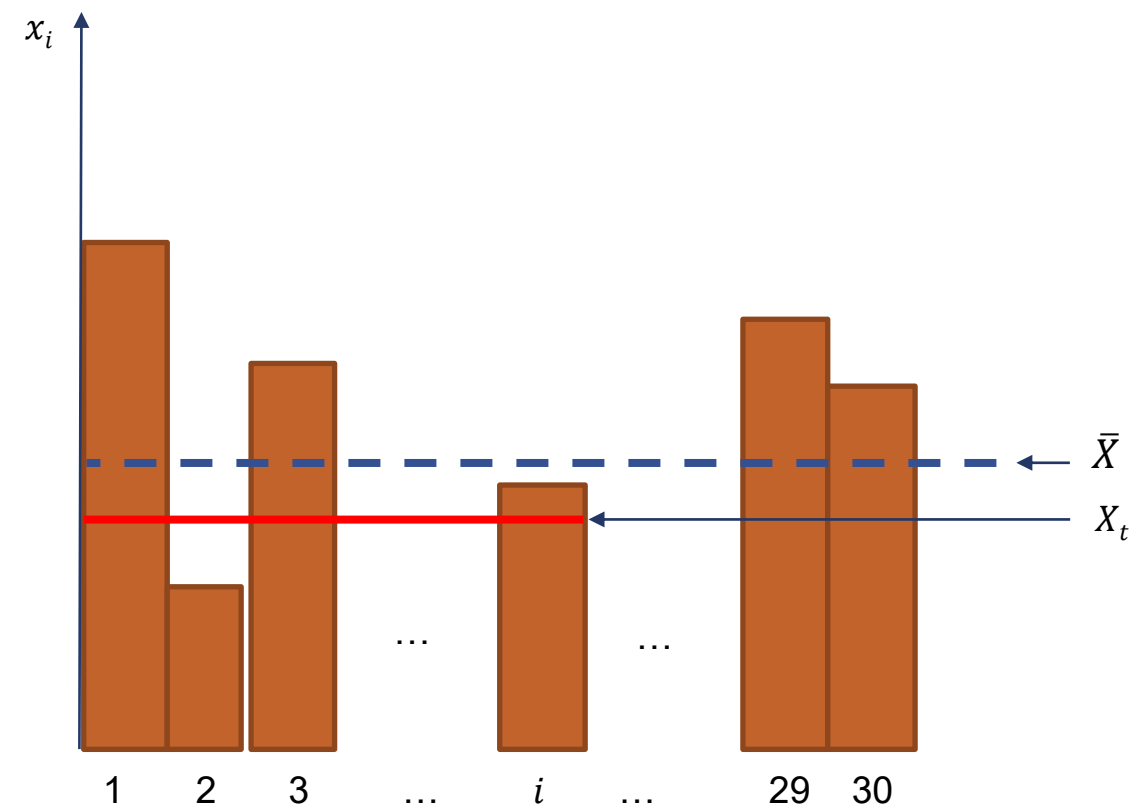
- Bank B



- Interbank market transfers funds between lenders and borrowers.
- Willingness to borrow or lend funds will be affected by the official Bank Rate.

Arbitrage

# Liquidity management



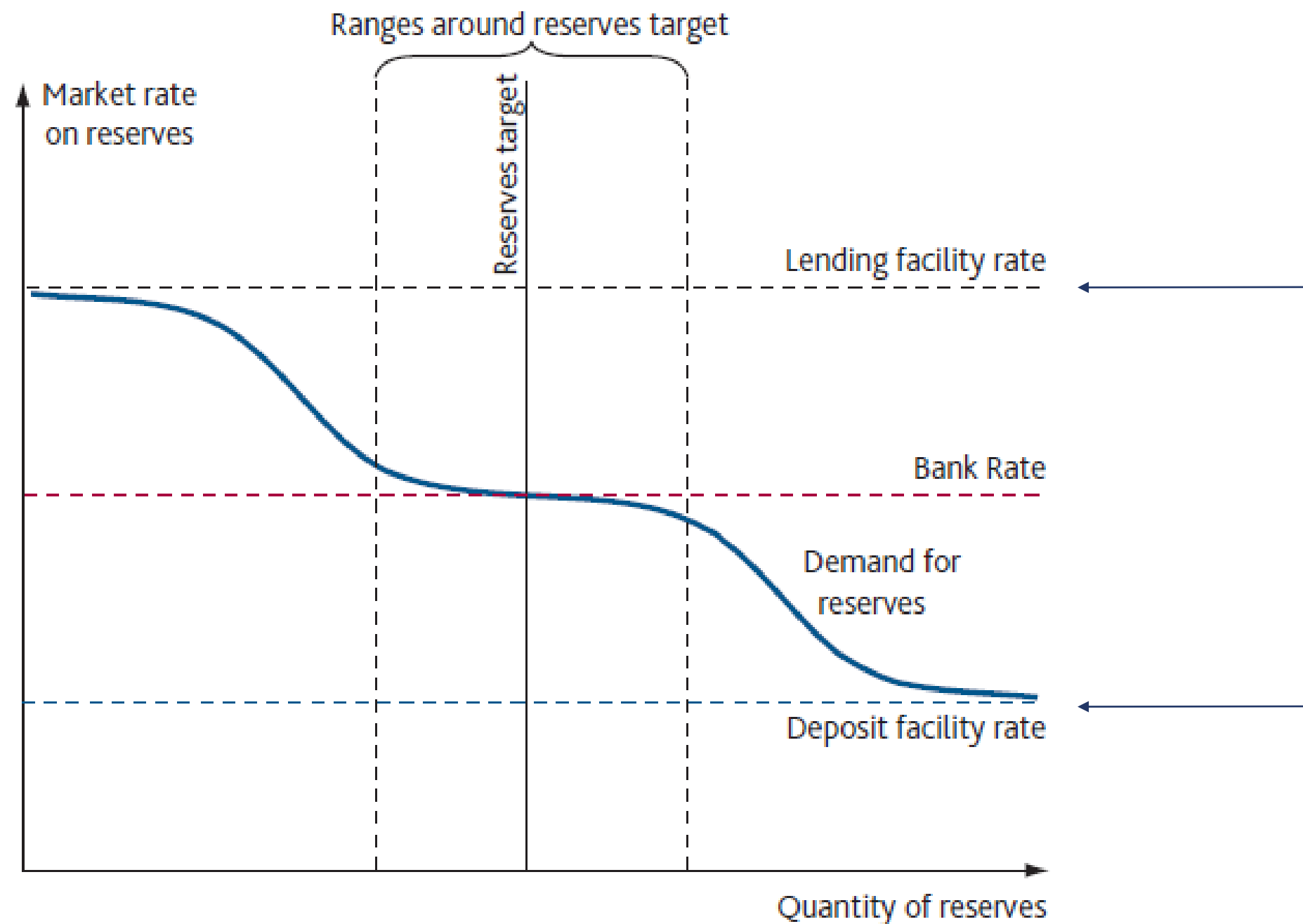
**Reserves averaging scheme will smooth-out day-to-day market rates volatility.**

1. Banks can finish each day either with above or below the target reserve balances.
2. There is no rush to borrow funds when market rates are high and can adjust later.
3. There is no rush to lend funds when market rates are low.

Arbitrage

# Demand for reserves

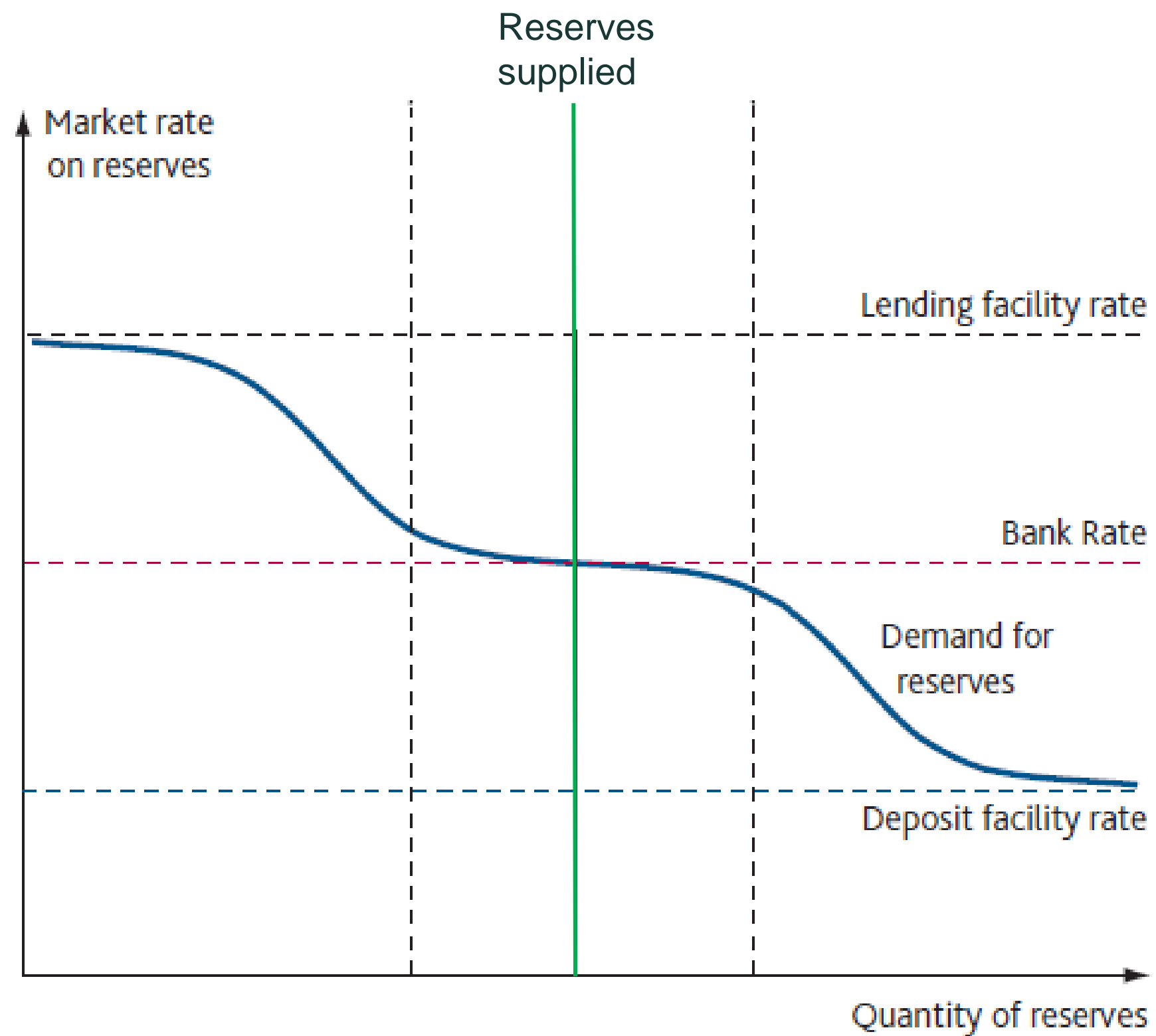
Chart 1 SMF participants' demand for reserves



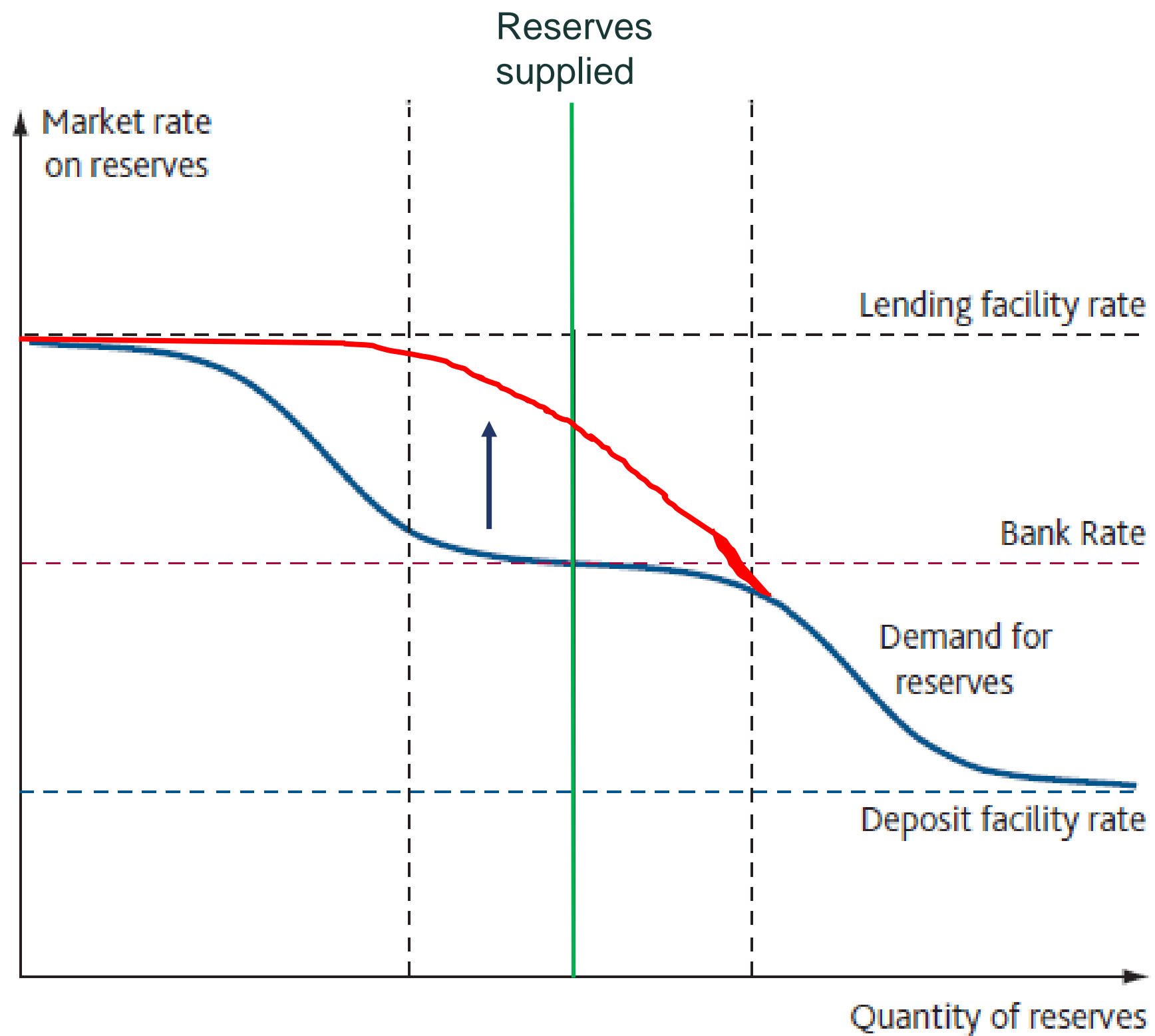
## Operational Standing Facilities (OSFs)

An SMF participant can ensure it hits its target by making use of the Bank's Operational Standing Facilities (OSFs). These bilateral facilities allow SMF participants to borrow overnight from the Bank (against high-quality collateral) at a rate above Bank Rate or to deposit reserves overnight with the Bank at a rate below Bank Rate. (Redbook, P5)

# The Bank of England is the sole supplier



# Interbank market equilibrium (demand/supply for reserves)

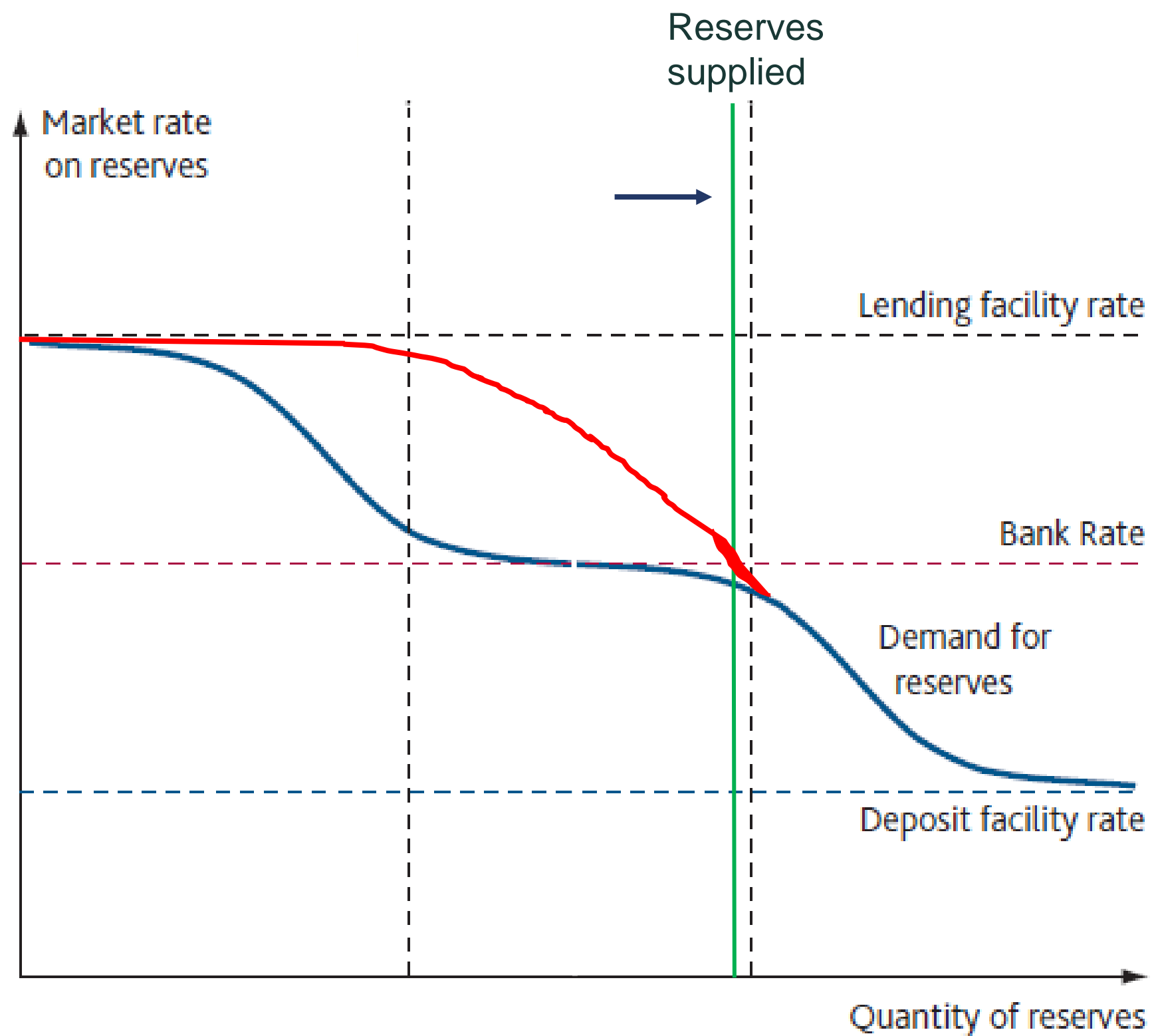


--- excessive funding demand

--- harder to control the market interest rate

1. upward pressure on the market interest rate

# Interbank market equilibrium (demand/supply for reserves)



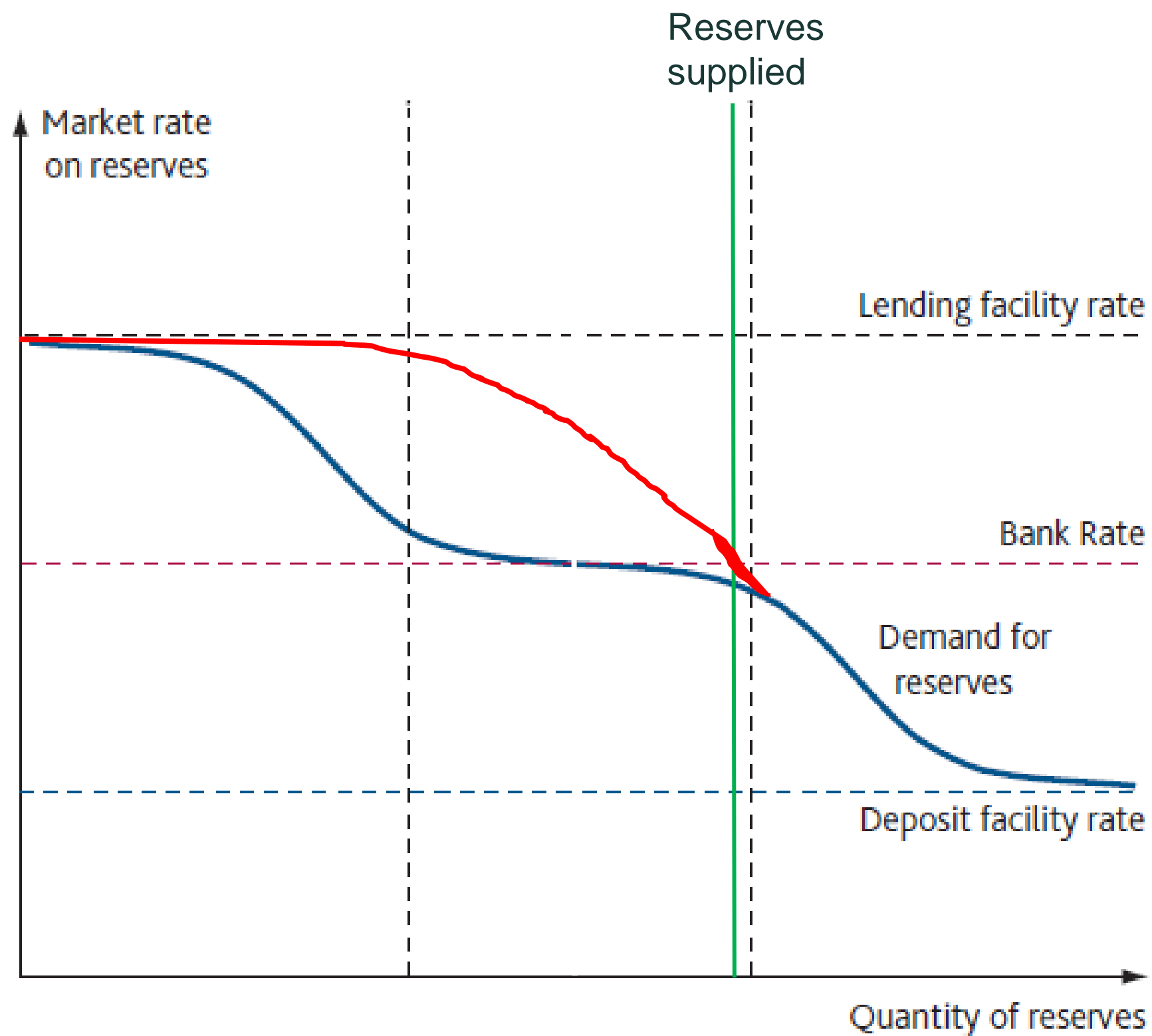
- excessive funding demand
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1. upward pressure on the market interest rate

The Bank of England supplied more reserves by:

1. lending against collateral
2. buying securities outright

# Interbank market equilibrium (demand/supply for reserves)



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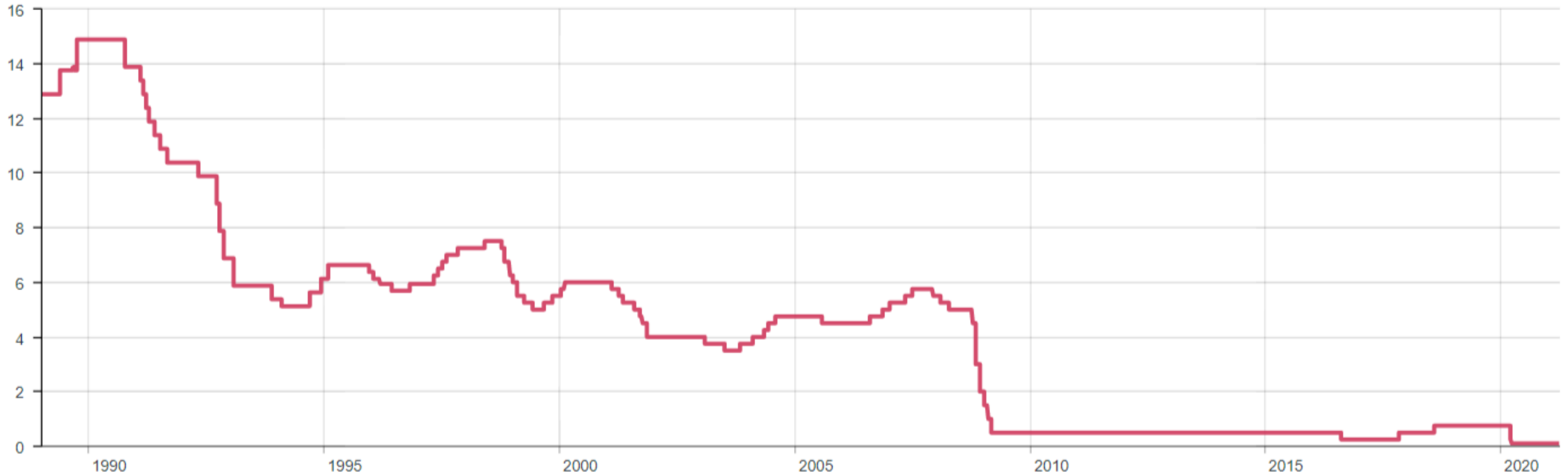
**Open Market Operations**

# Part 3

1. Unconventional monetary policy tools
2. Term structure
3. Yield curve



# Bank Rate

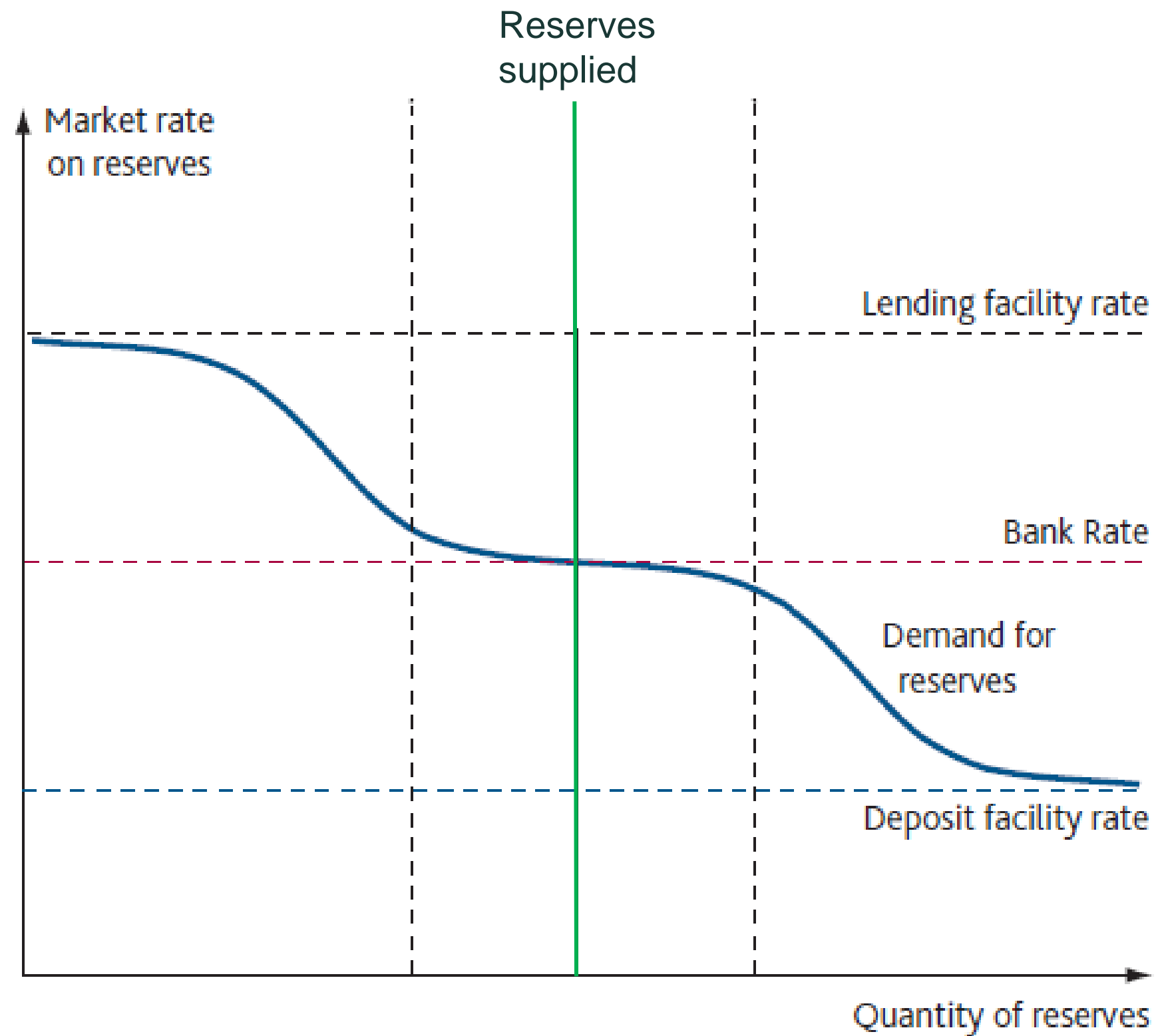


# Unconventional monetary policy tools

Short-term nominal interest rate at the effective lower bound

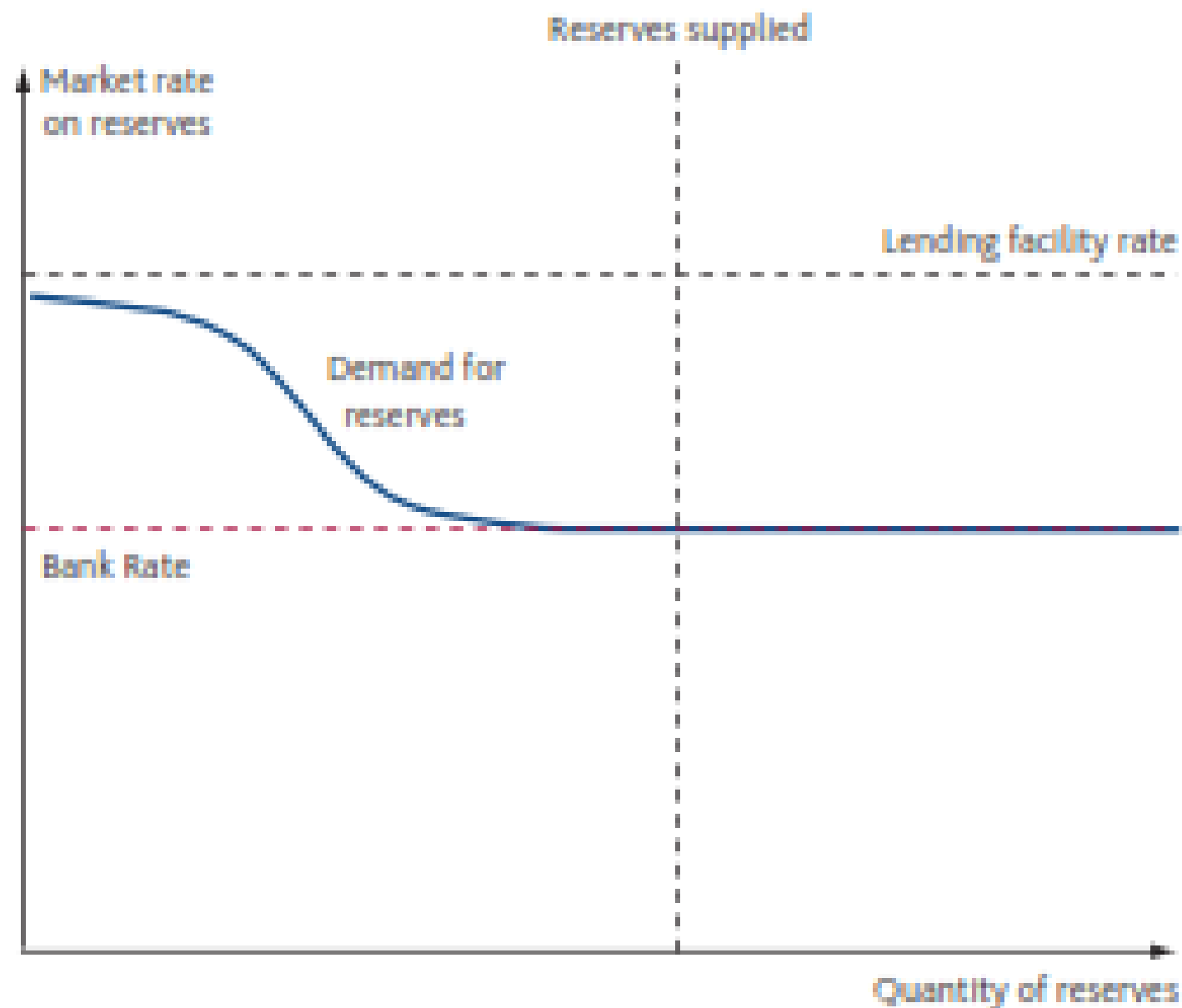
1. Quantitative easing (Central Bank Asset Purchases)

# Imbalance in the reserve demand/supply system



# A “floor system”

Chart 2 The current reserves scheme



All reserves balances are remunerated at Bank Rate

--- no incentives to lend funds to other banks at rates lower than Bank Rate, leading to flattening the demand curve after the sufficient amount of reserves

--- no incentives to avoid excess reserves (more than the required level)

# Unconventional monetary policy tools

Short-term nominal interest rate at the effective lower bound

1. Quantitative easing (Central Bank Asset Purchases)
  - buying longer-term assets to reduce **longer-term interest rates**

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Short-term nominal interest rate at the effective lower bound

1. Quantitative easing (Central Bank Asset Purchases)
  - buying longer-term assets to reduce **longer-term interest rates**
2. Forward guidance (“Open Mouth Operation”)
  - when short-term rates cannot be reduced further, policymakers may want to put downward pressure on **longer-term rates** by persuading market participants that they intend to keep the policy rate at the lower bound for an extended period (Bernanke, 2020)

# Forward guidance (FG)

BOE's FG



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## News release

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7 August 2013

### **Bank of England provides explicit guidance regarding the future conduct of monetary policy**

At its meeting on 1 August, the Bank of England's Monetary Policy Committee (MPC) voted to provide some explicit guidance regarding the future conduct of monetary policy.

The Committee intends at a minimum to maintain the current highly stimulative stance of monetary policy until economic slack has been substantially reduced, provided this does not entail material risks to either price stability or financial stability.

In particular, the MPC intends not to raise Bank Rate from its current level of 0.5% at least until the Labour Force Survey headline measure of the unemployment rate has fallen to a threshold of 7%, subject to the conditions below.

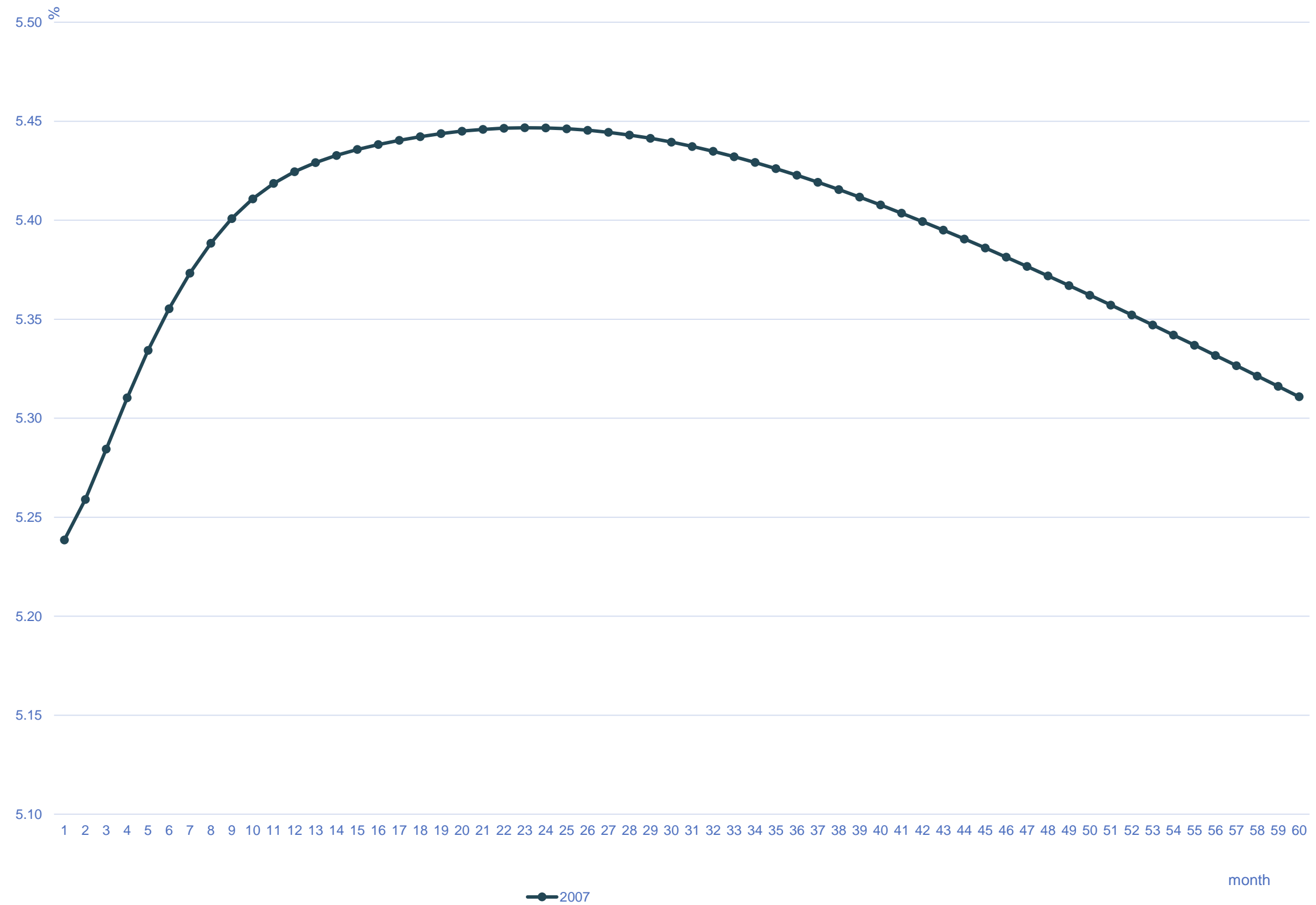
## The expectations theory of the term structure

$$i_t^n = \frac{i_t^1 + E_t[i_{t+1}^1] + \dots + E_t[i_{t+n-1}^1]}{n} + \theta_{nt}$$

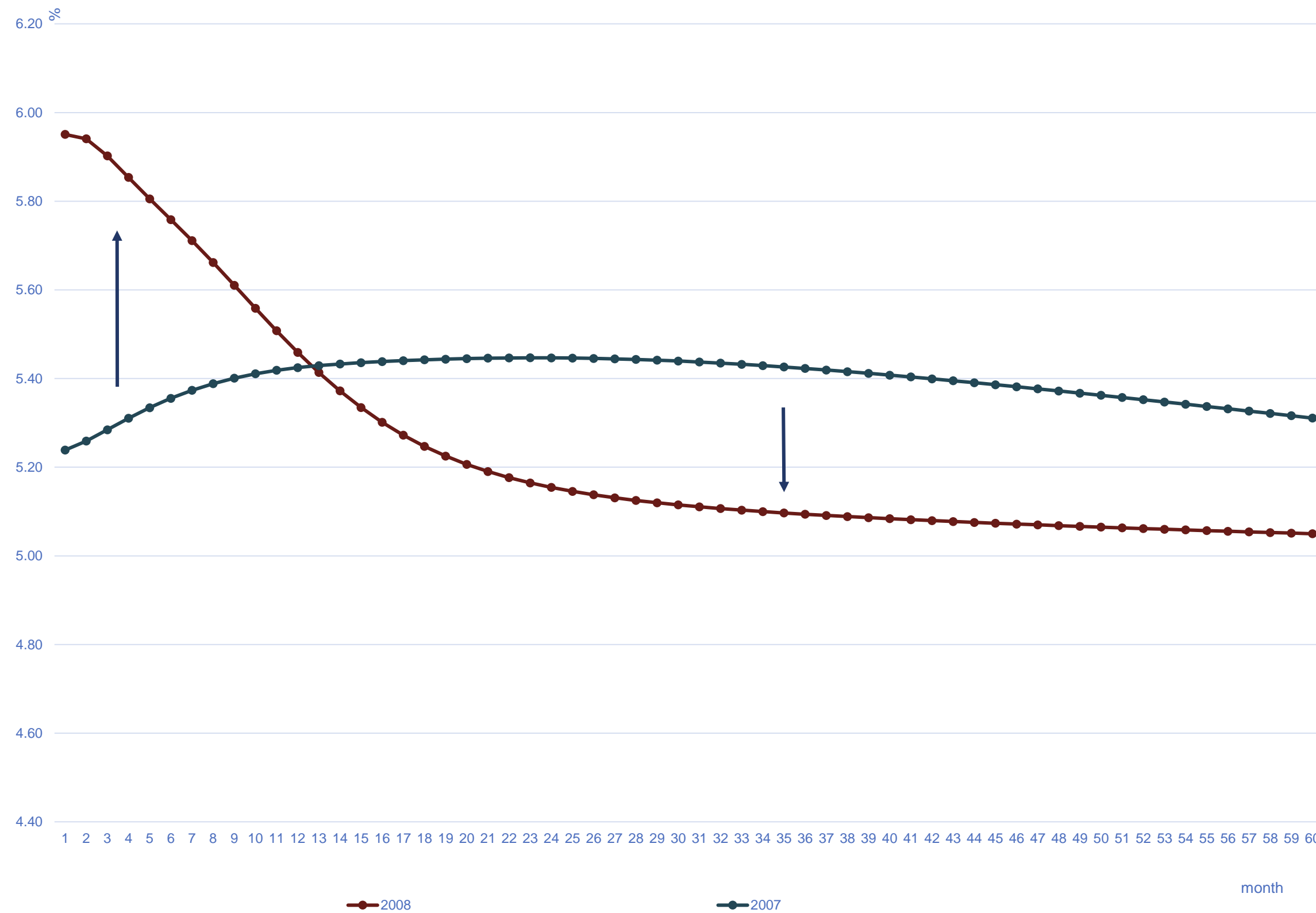
Longer-term rates = (1) the average expected short-term rates over the duration  
+ (2) the term premium (compensation for longer horizon investment)



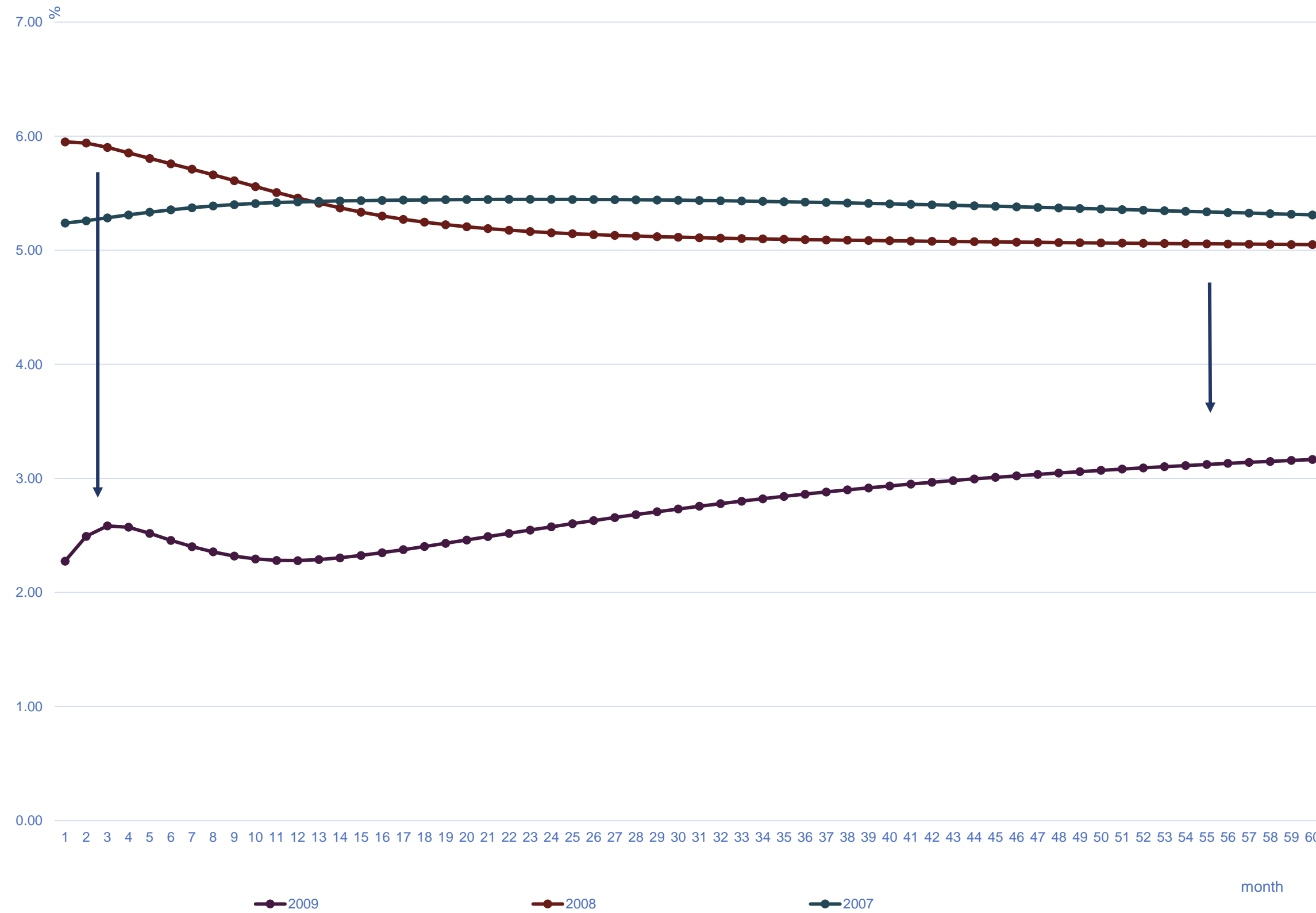
# Yield curve in 2007



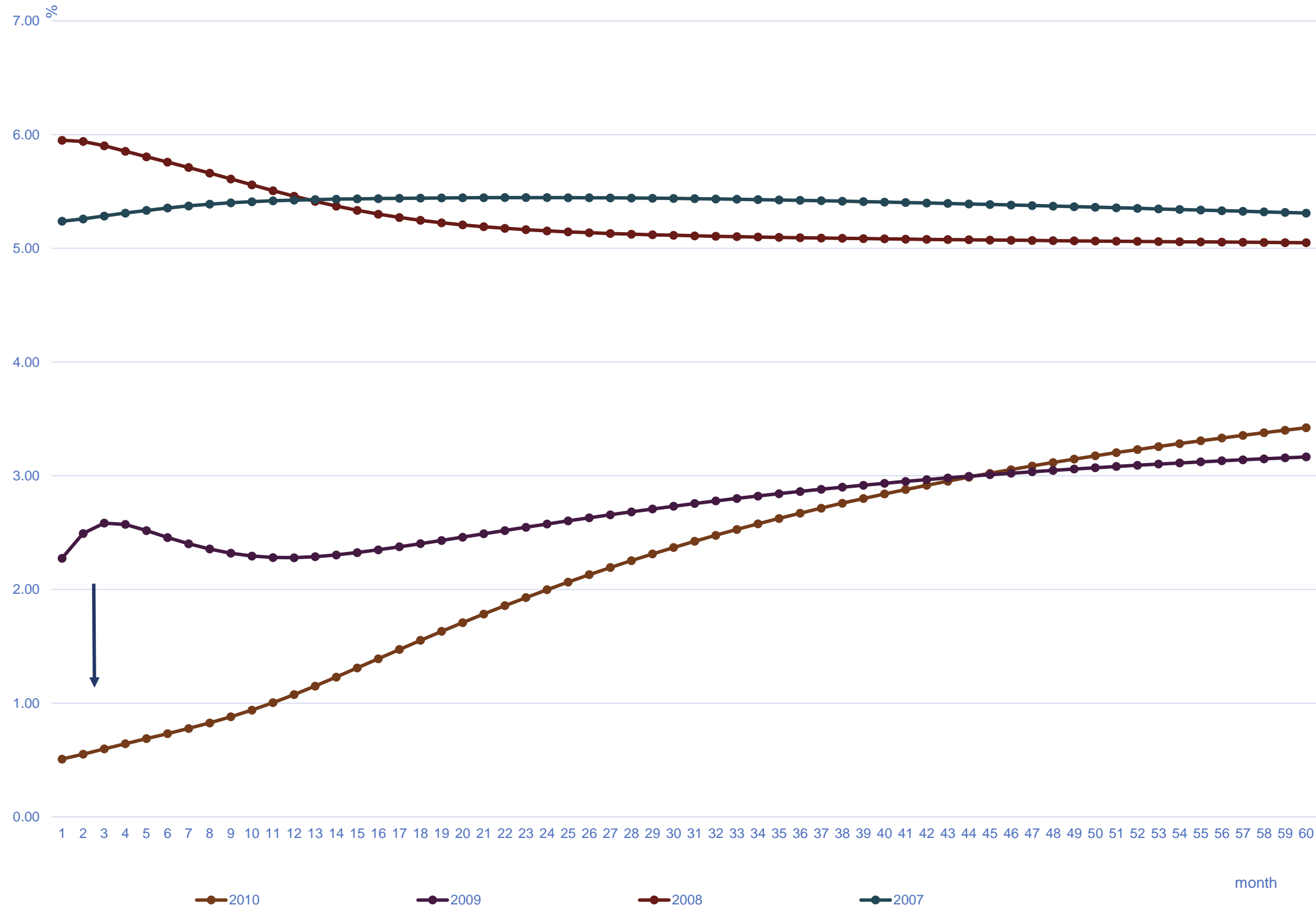
# Yield curve in 2008



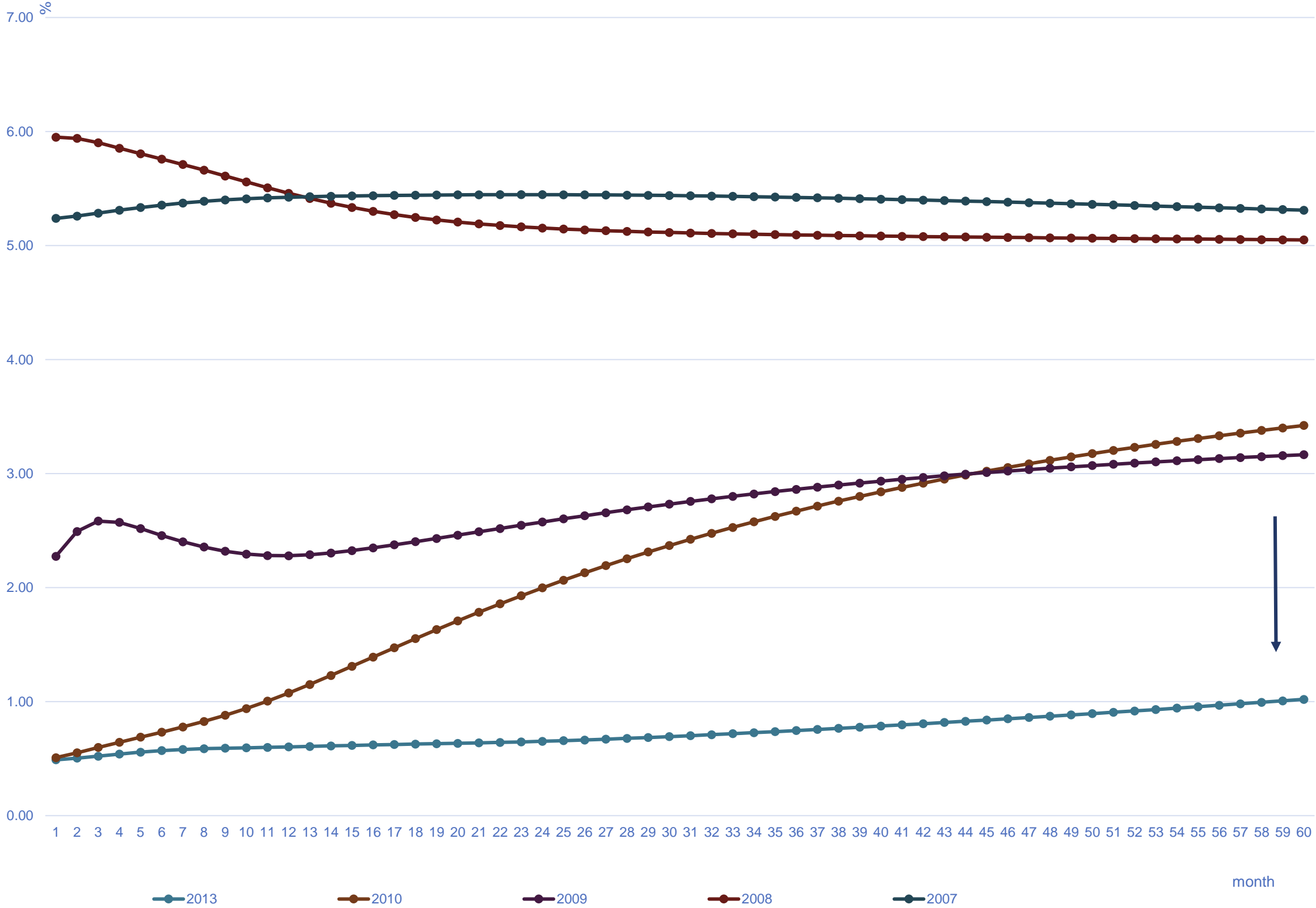
# Yield curve in 2009



# Yield curve in 2010



# Yield curve in 2013





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