



EUROPEAN CENTRAL BANK

EUROSYSTEM

European Central Bank's strategy on liquidity provision

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Outline

1. **Monetary policy operational framework**
2. **Liquidity management in normal times**
3. **Liquidity management during the turmoil**
 - **Before and after collapse of Lehman**
4. **Central bank measures: common trends and differences**

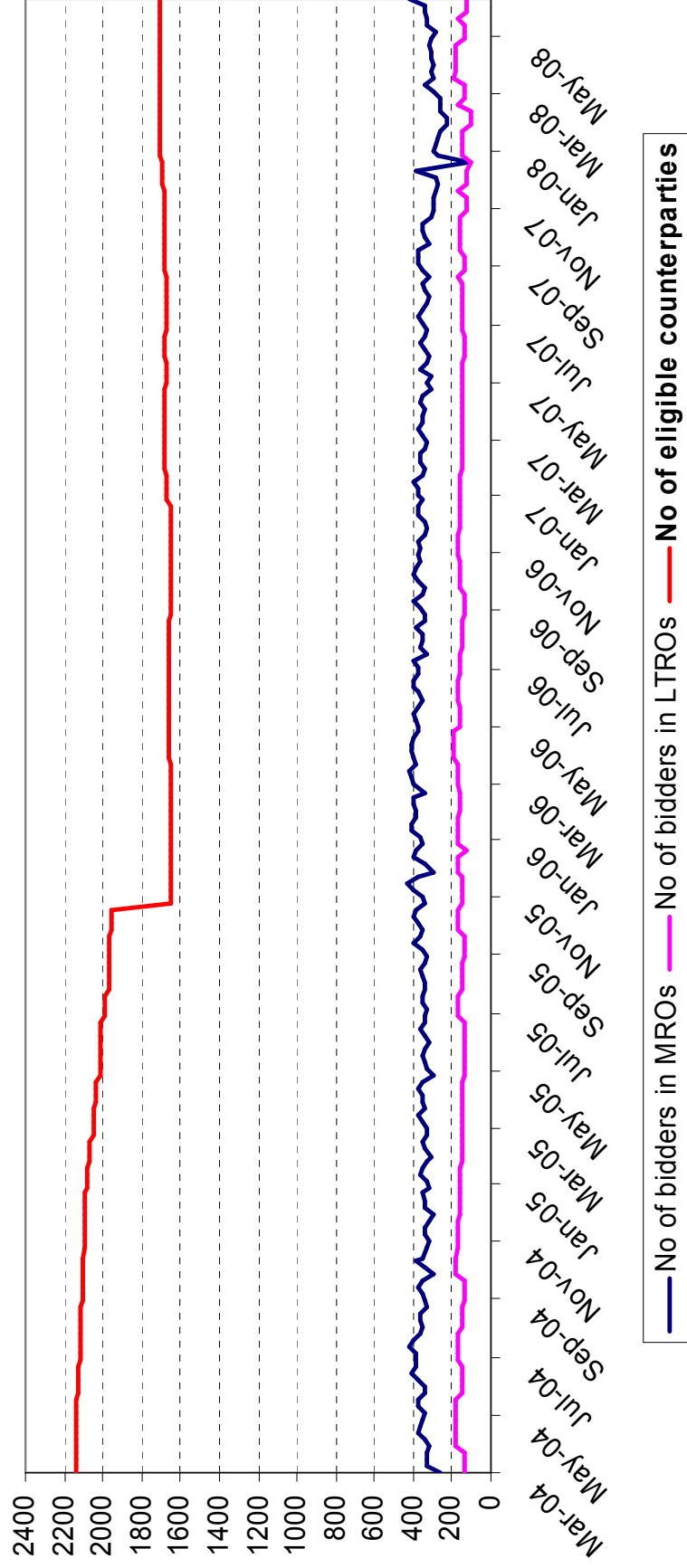
I. Objectives of the operational framework

- The operational framework, in order to

Efficiently implement the monetary policy stance

- provides liquidity to the banking system, and
- steers conditions in the money market

I. Eligible and participating counterparties



I. Instruments of the operational framework

Open market operations

- **Main refinancing operations**
- **Longer term refinancing operations**
- **Fine-tuning operations**
- **Structural operations**

Reserve requirements

Standing facilities

- **Marginal lending facility**
- **Deposit facility**

1. The Eurosystem's Instruments Principles of the ECB's Collateral Framework

Article 18.1 of the Statute:

All credit operations by the Eurosystem to be “based on adequate collateral”

Adequacy means:

1. Collateral must protect against losses in credit operations
2. There must be sufficient collateral potentially available to ensure that the Eurosystem can carry out its tasks

I. The Eurosystem's Instrument Key features of the ECB's Collateral Framework

The Single List of Collateral

- **Contains broad range of debt instruments and bank loans**
- **No collateral differentiation between instruments**
- **Single auction rate applicable to different types of collateral in tender operations**

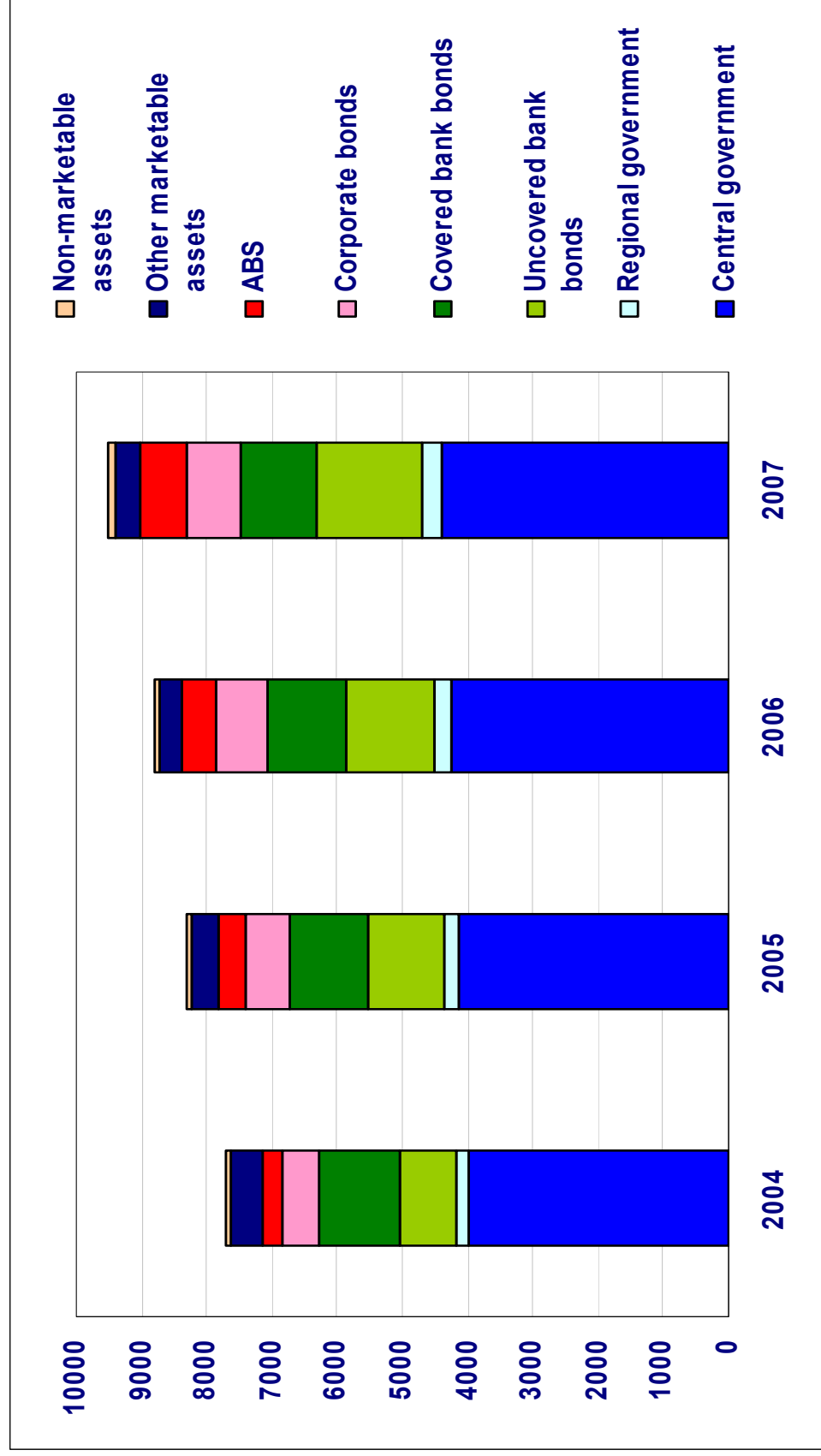
I. The Eurosystem's Instruments

Risk control and valuation of the Collateral

Eurosystem is very vigilant on financial risk

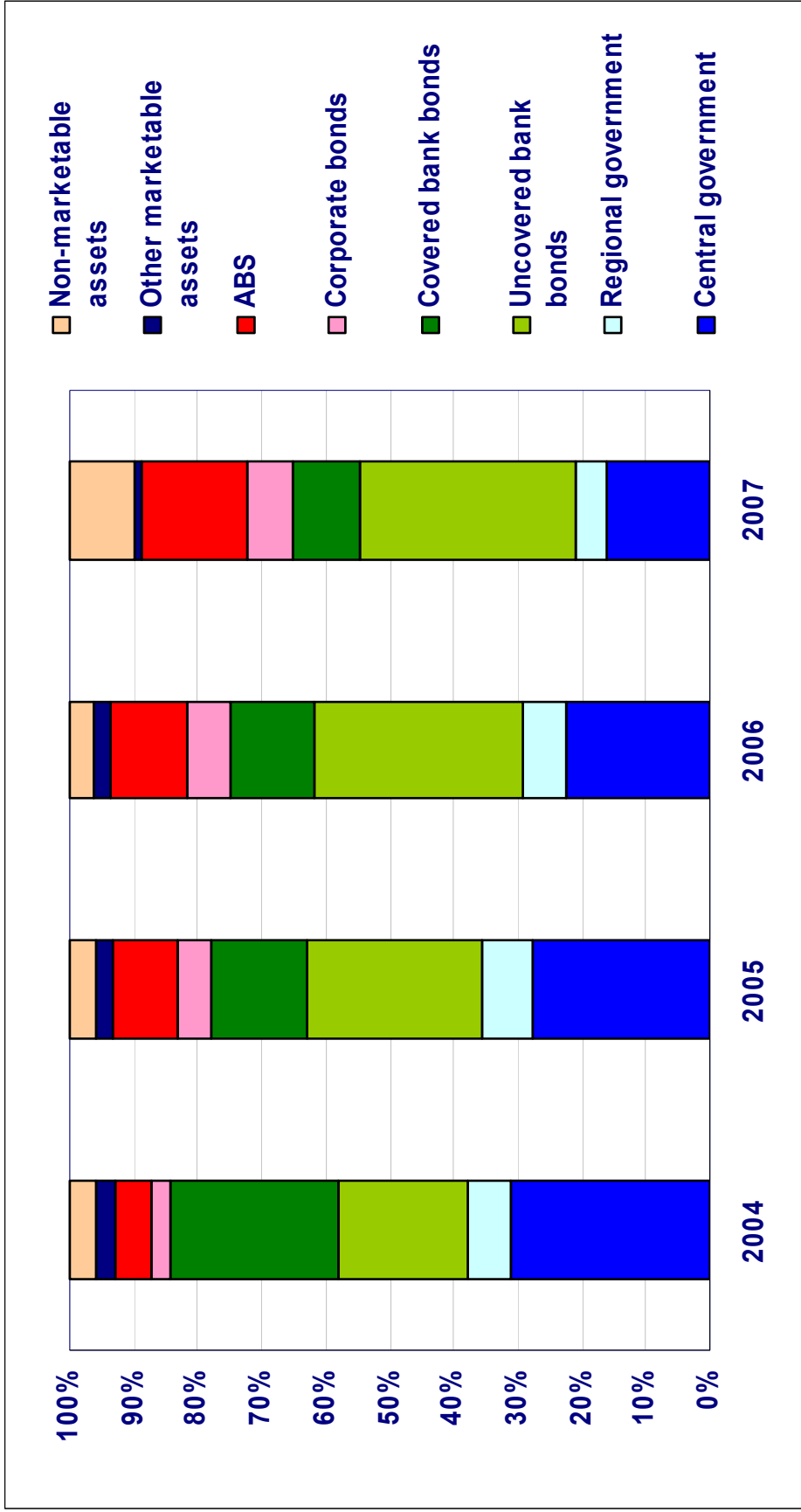
- Risk control (just like eligibility assessment) is on an individual asset basis
- Marketable assets:
 - mainly use of rating agencies' credit assessment
 - threshold: A- in normal time, BBB- since October 2008 (except ABS)
- Non-marketable assets: in-house assessment and counterparty systems
- Revaluation on a daily basis:
 - Market valuation
 - If no market price, or stale market price: theoretical valuation
 - May result in a margin call
- Haircuts:
 - more conservative than in the private repo market
 - protection against market and liquidity risk
 - in some cases valuation markdowns
- In some cases other risk control measures (limits per asset)

I. The Eurosystem's Instruments Evolution of collateral by asset type (€ billion)

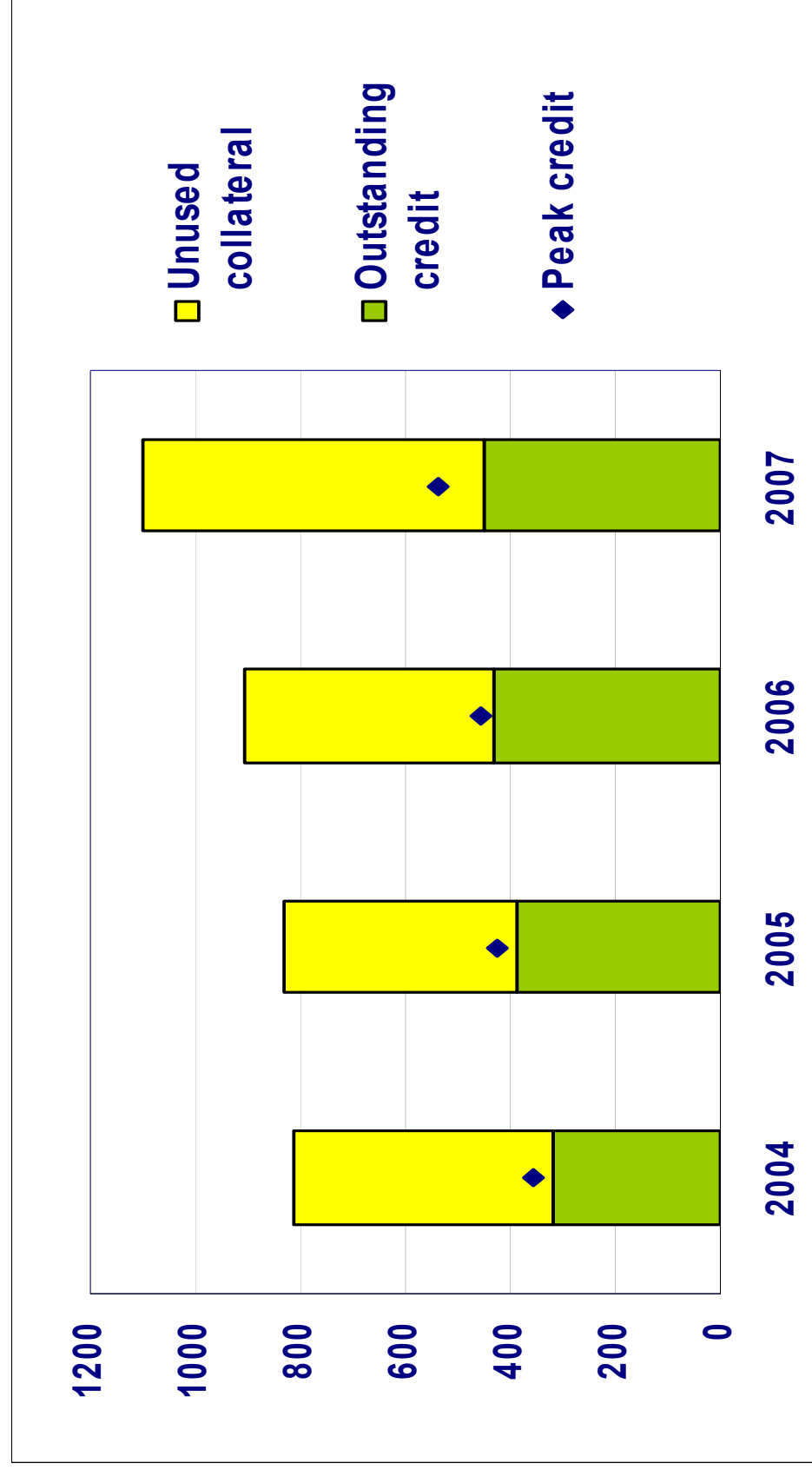


I. The Eurosystem's Instruments

Trend towards use of more illiquid collateral



I. Aggregate amounts of unused collateral held with the Eurosystem (€ billion)



2. Simplified balance sheet of the Eurosystem (before the turmoil)

29/06/2007, EUR billions

Assets

Autonomous liquidity factors

Net foreign assets
Domestic assets

317
131

Liabilities

Autonomous liquidity factors

Banknotes in circulation
Government deposits
Other autonomous factors (net)

633
70
27

Monetary policy instruments

Main refinancing operation
Longer term refinancing operation
Marginal lending facility

313
150
1

Total 913

Monetary policy instruments

Current accounts
Absorbing operations
Deposit facility

182
0
1

Total 913

Liquidity

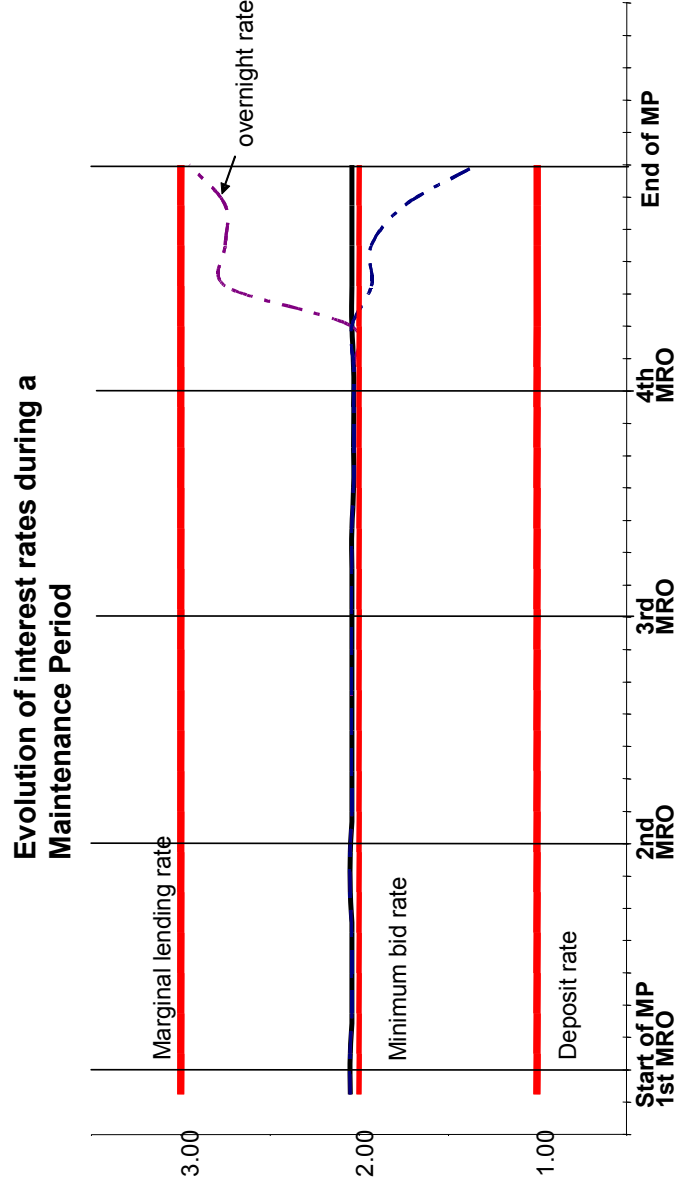
2. Simplified balance sheet of US Fed (before the turmoil)

27/06/2007, USD billions

Assets		Liabilities	
Autonomous liquidity factors		Autonomous liquidity factors	
Net foreign assets	34	Banknotes in circulation	775
Domestic assets	790	Government deposits	4
		Other autonomous factors (net)	19
Monetary policy instruments		Monetary policy instruments	
Repos	20	Current accounts	16
TAF	0	Reverse repos	30
Lending	0	Treasury suppl. financing account	0
	Total 845		Total 845

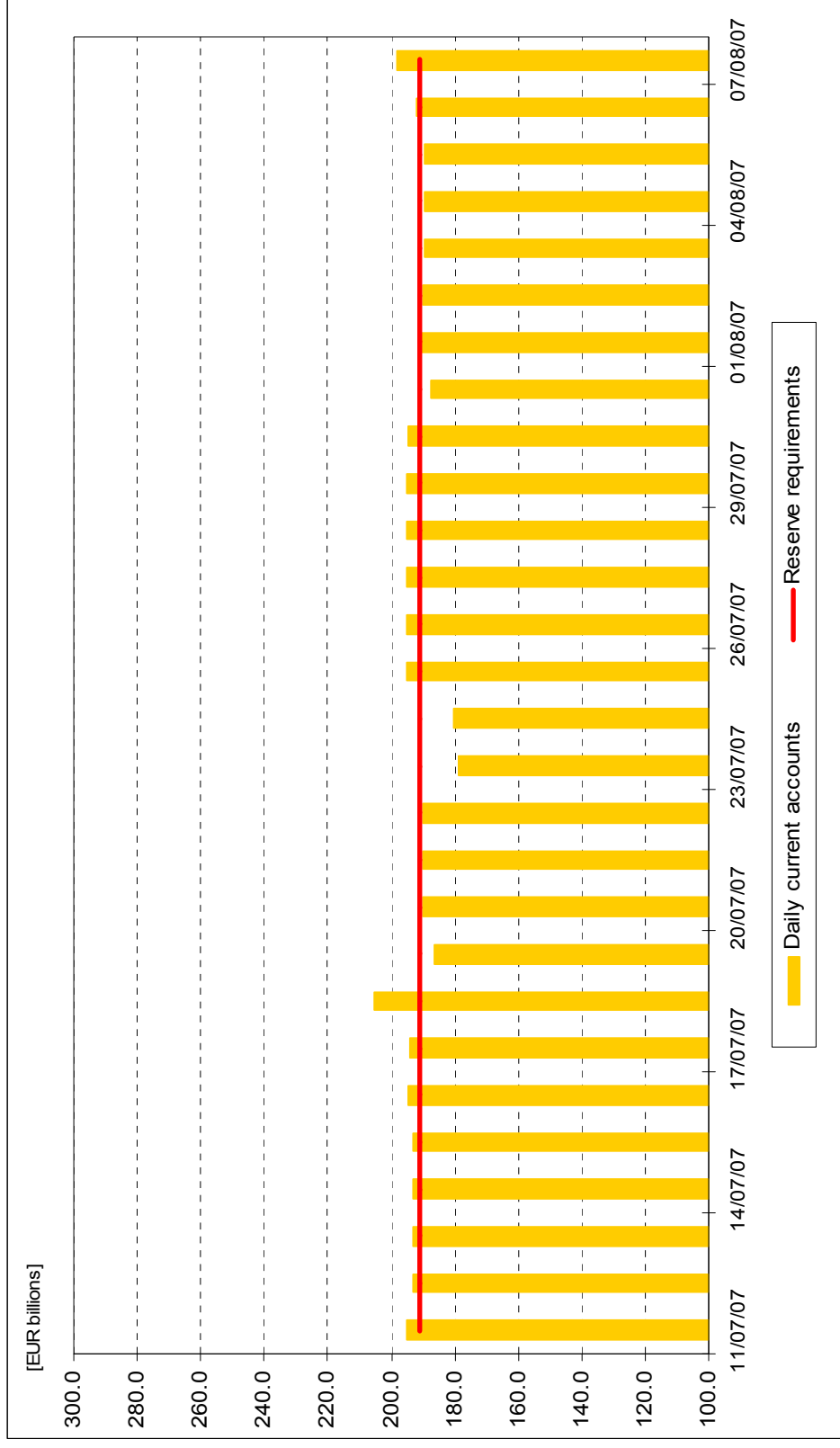
2. Steering short term rates (normal conditions)

- **Rationale for the benchmark amount**
 - **Expectation for the last day: EONIA = mid point of corridor**
 - **On any other day: EONIA = expectation for the last day**

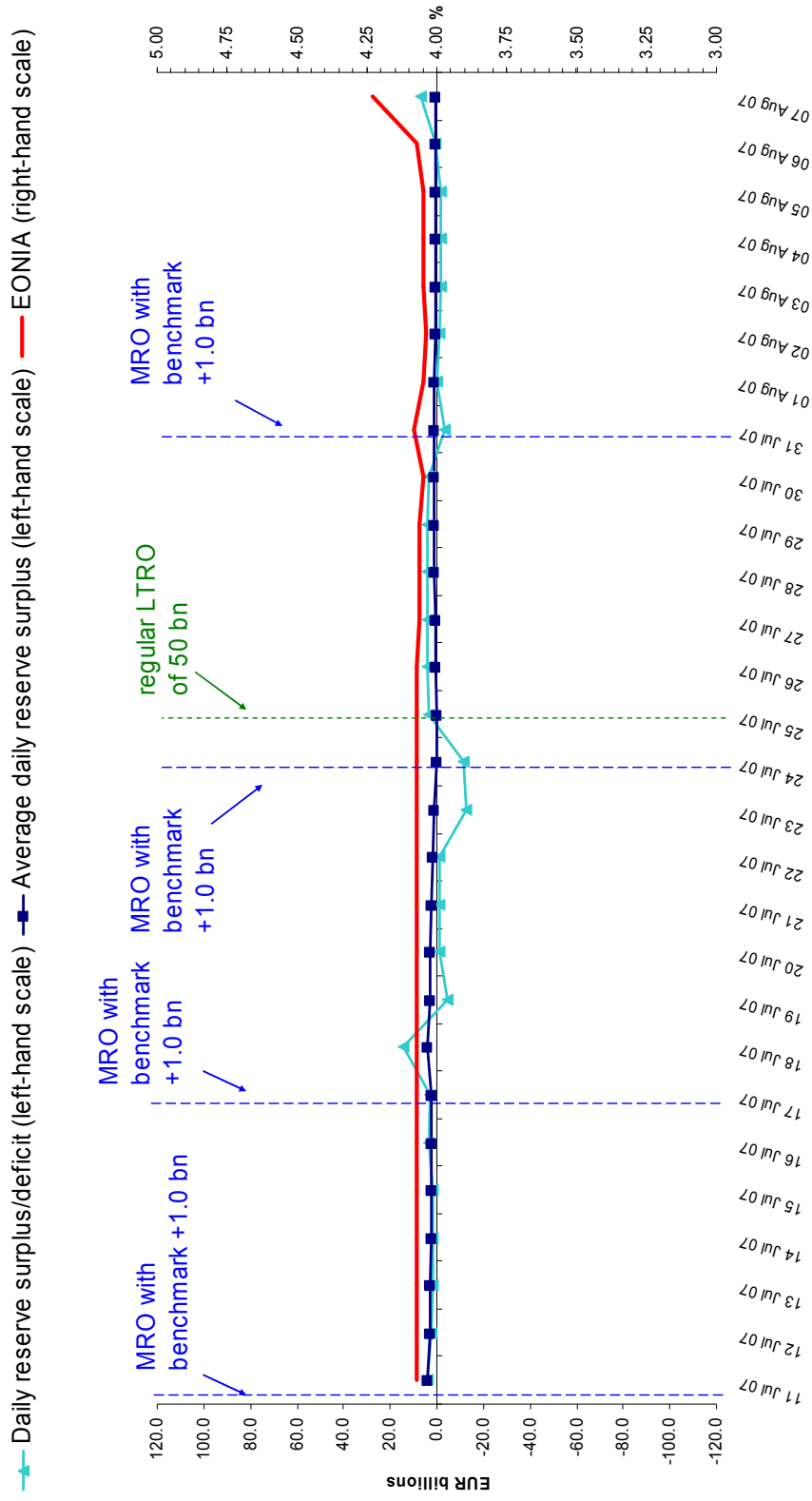


2. Steering short term rates (normal conditions)

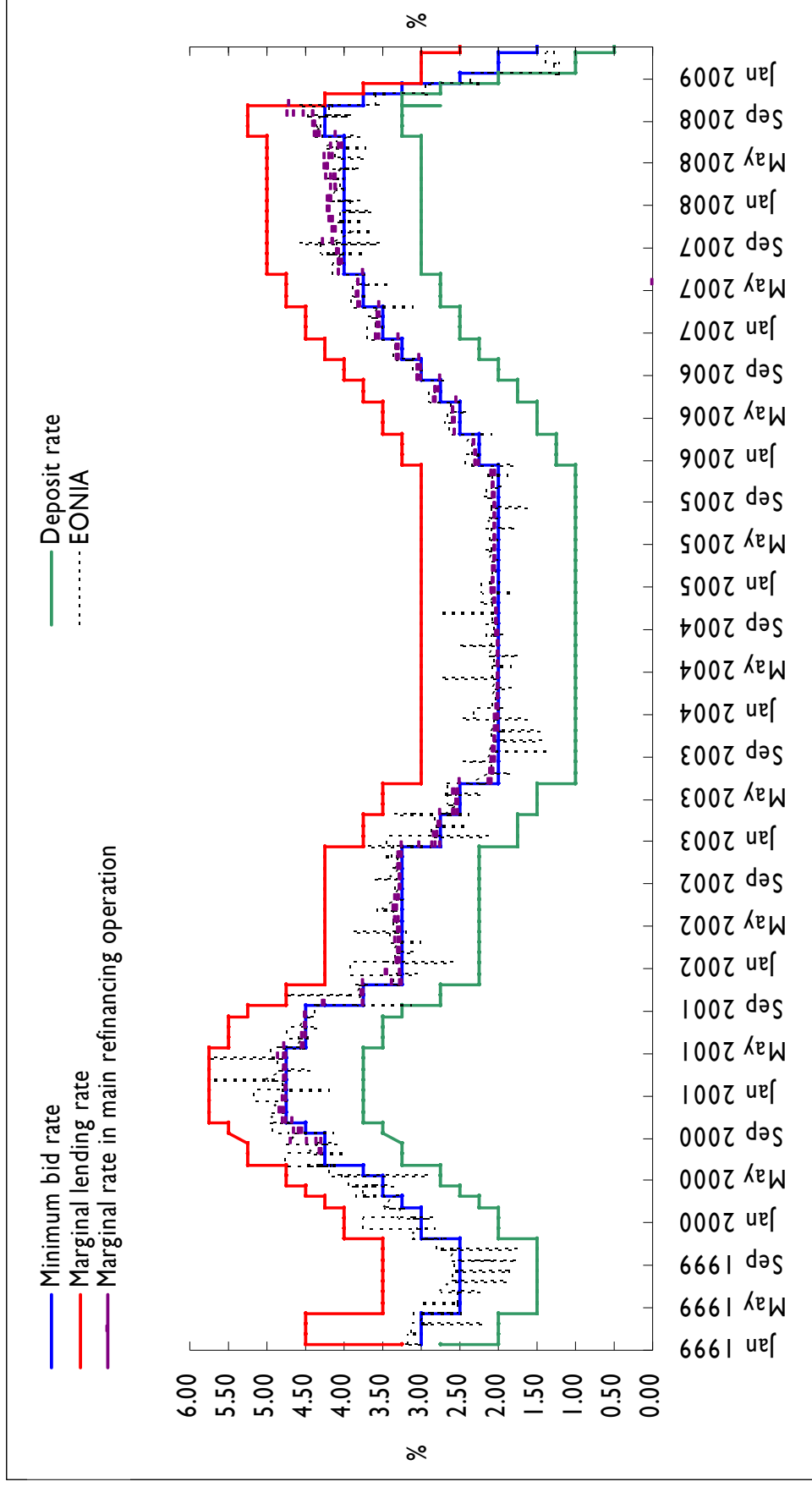
- **Set allotment amount so that banks can smoothly fulfil reserve requirements**



2. Maintenance period 11 July – 7 August 2007



2. ECB rates and EONIA



3. Financial market turmoil, before October 2008

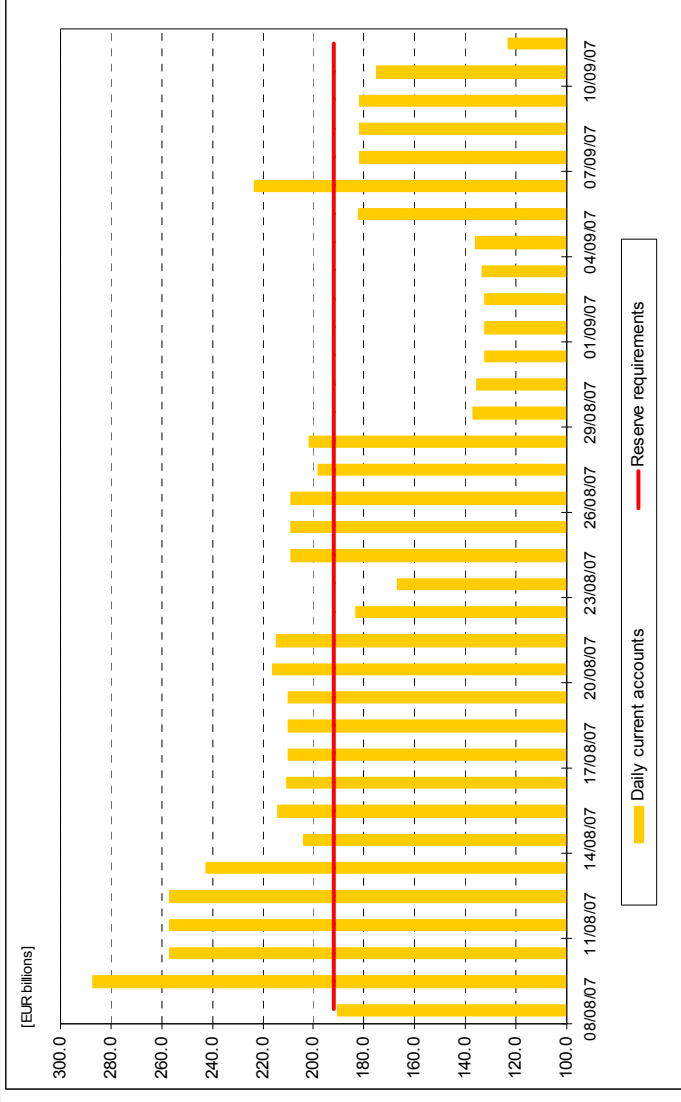
- Important structural features -

- **Large number of Counterparties**
- **Broad range of collateral**
- **Large refinancing operations**
- **=> Ability to channel liquidity to banks with a need**
- **=> No need to significantly change the operational framework**

SIZE MATTERS!

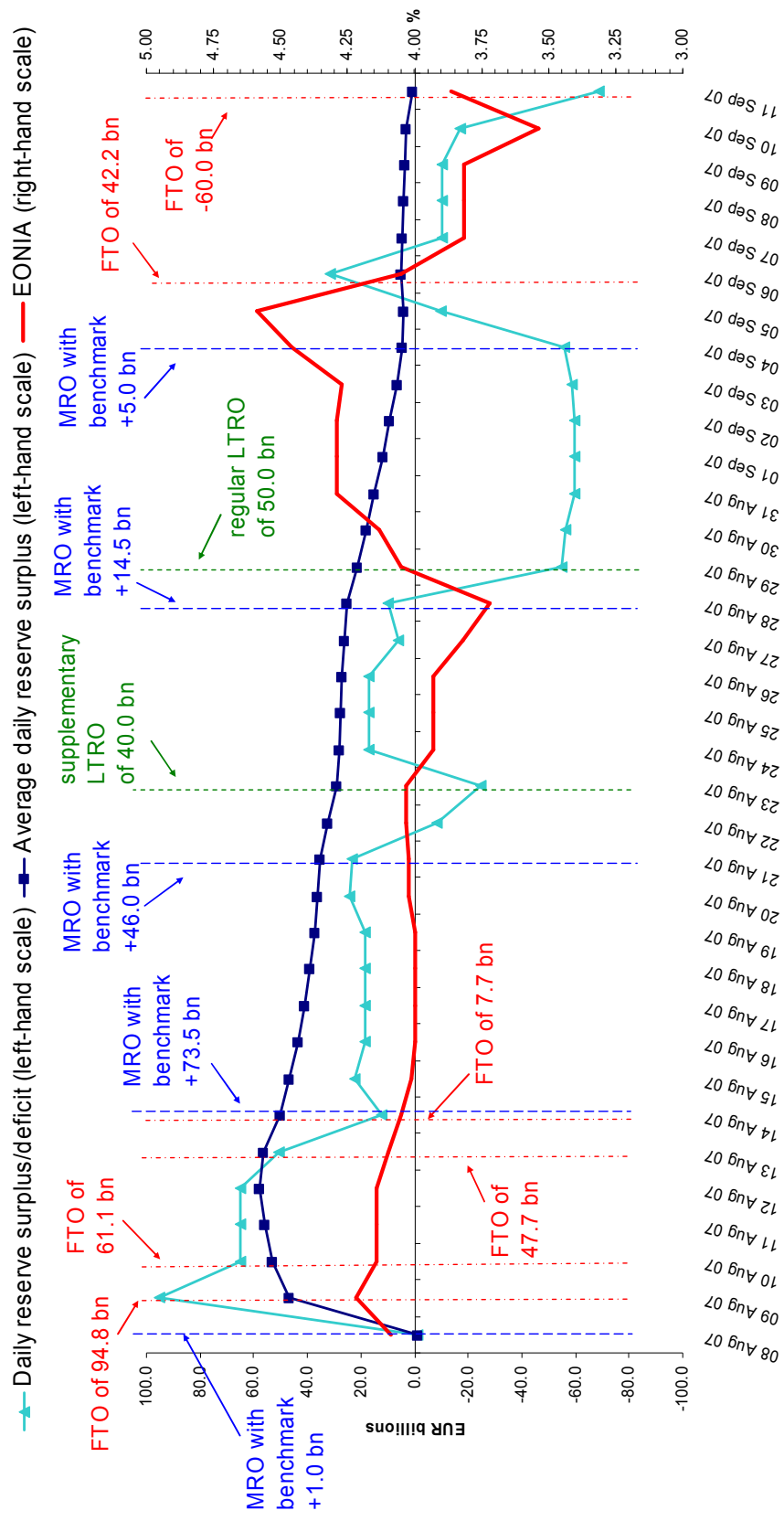
3. Financial market turmoil, before October 2008 - the limited measures needed -

- **Frontloading of liquidity**
- **Fine tuning**

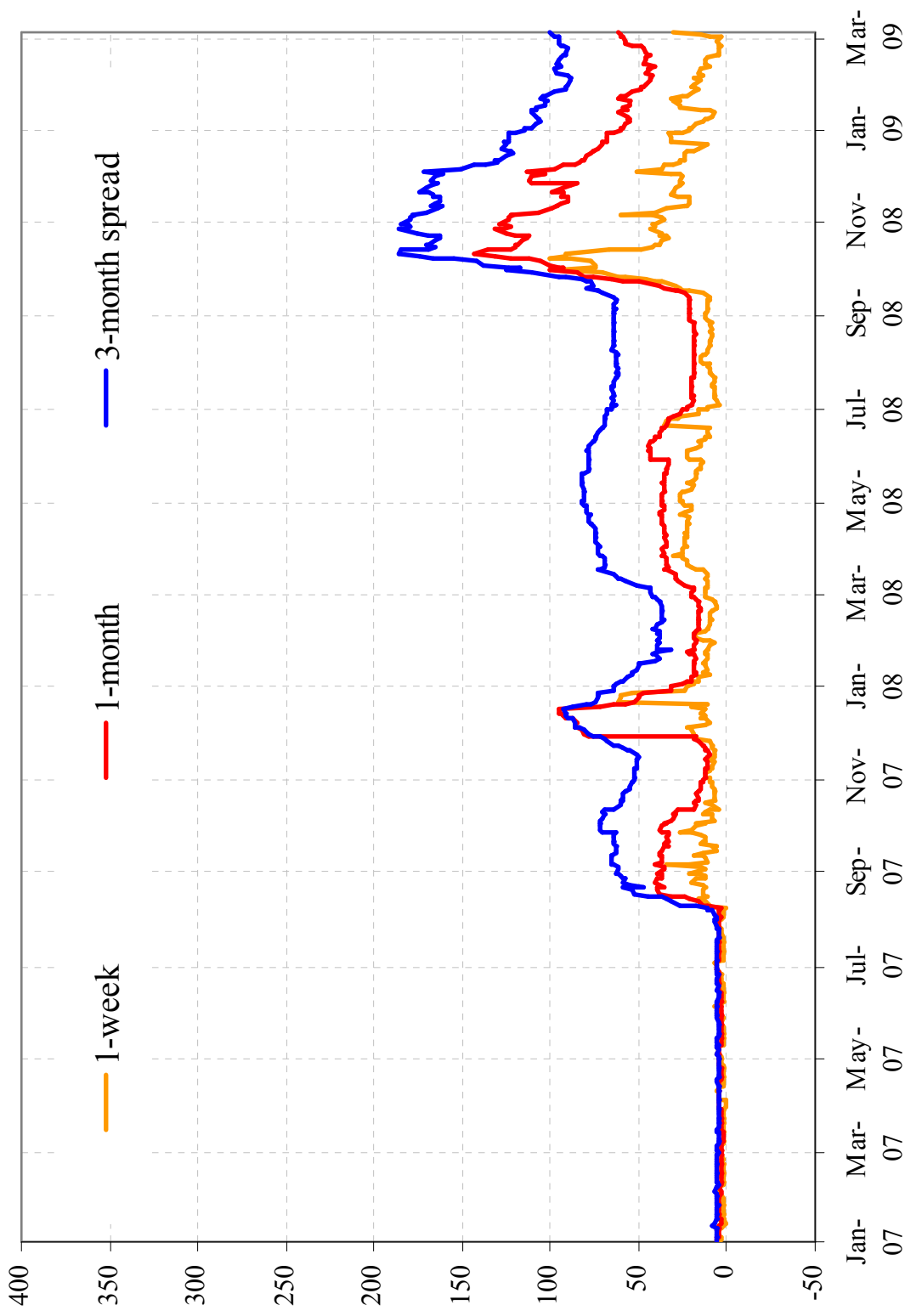


- **One week MROs substituted with 3 month LTROs**
⇒ **No increase in overall liquidity supply**
- **Provision of USD liquidity against euro collateral**
⇒ **FX swaps with US Fed**

3. Maintenance period 8 August – 11 September 2007



3. Financial market turmoil, after October 2008



3. Financial market turmoil, after October 2008

- Additional significant measures needed -

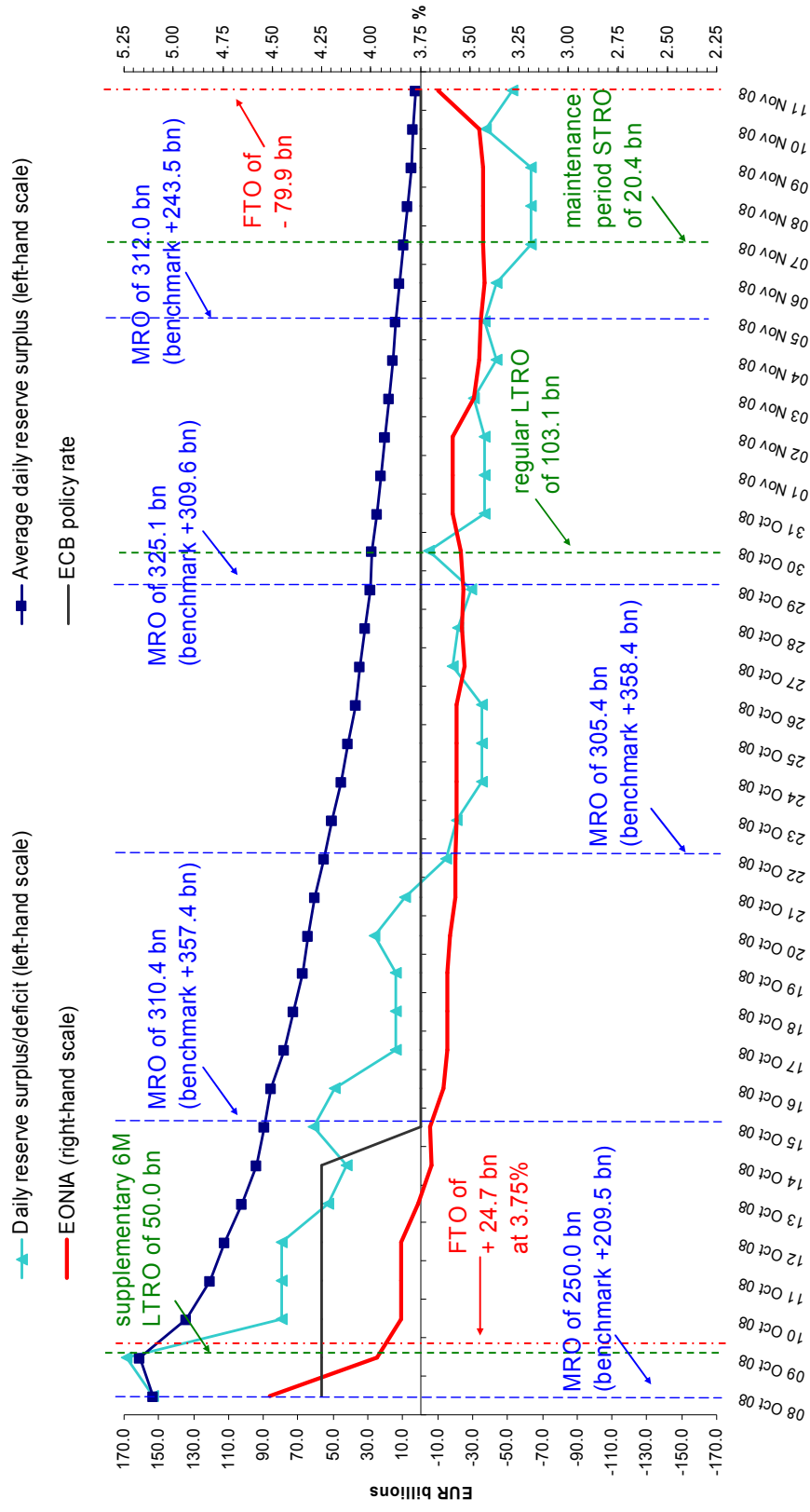
Objective: avoid money market failure leading to credit crunch

- Enlarged list of collateral (Until end-2009)
 - lowering of credit rating from A- to BBB- (except for ABS)
 - debt instruments issued by banks on certain non-regulated markets (e.g. CDs)
 - debt denominated in USD, GBP or JPY and that fulfil all other eligibility criteria
 - (add-on hc of 5 to 10%)
 - Fixed rate full allotment in MROs + LTROs
 - no longer control over liquidity supply
 - Less precise steering of short term rates
 - Increased number of LTROs
 - 1 month + 2 x 3 months + 6 months
 - More intermediation of FX refinancing:
 - Fixed rate full allotment in USD (+100 bps)
 - Provision of CHF
 - Provision of Euro outside euro area
-

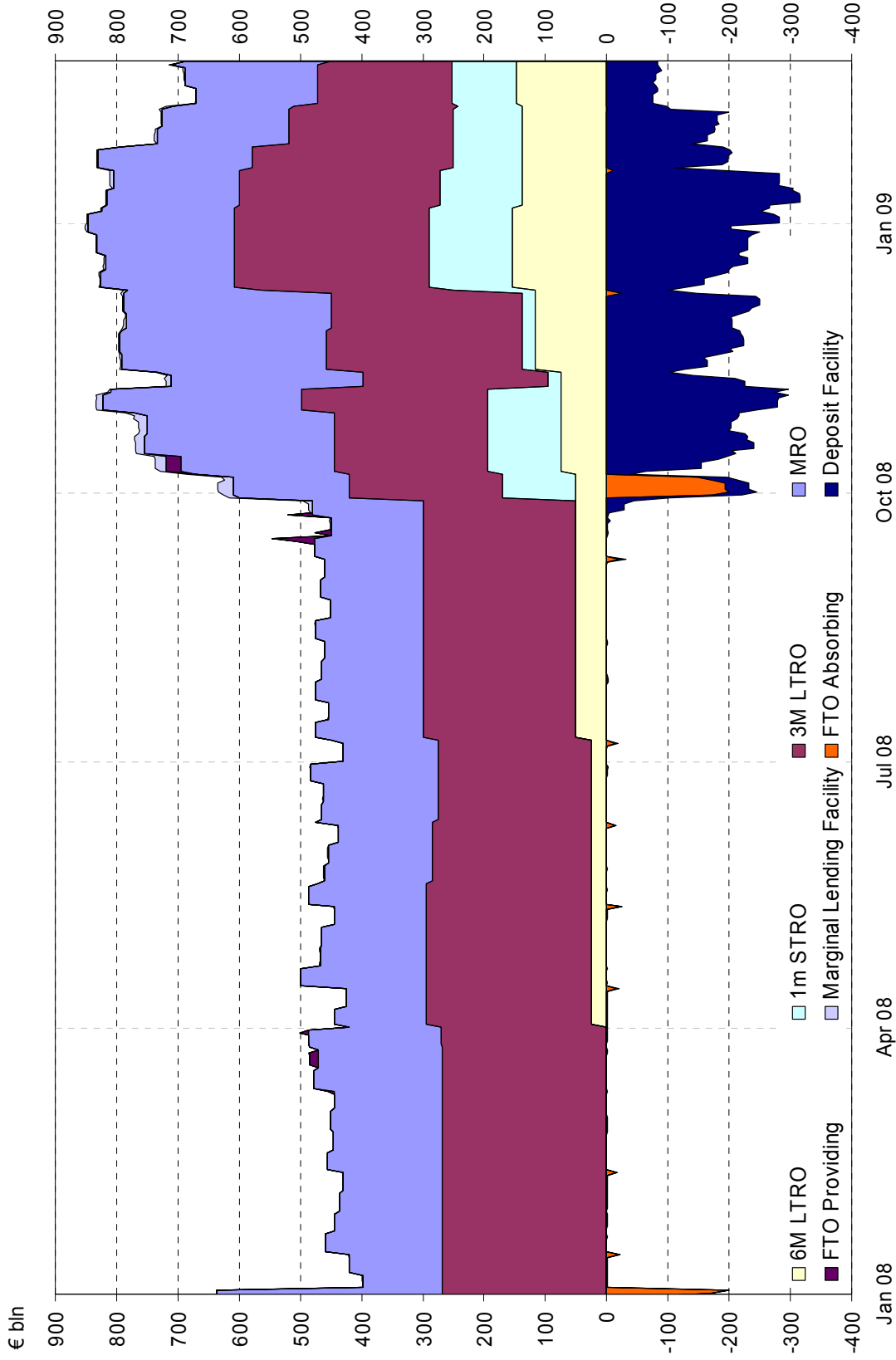
Objective: maintain price stability

- Significant and rapid reduction of policy rate

3. Maintenance period 8 October – 11 November 2008

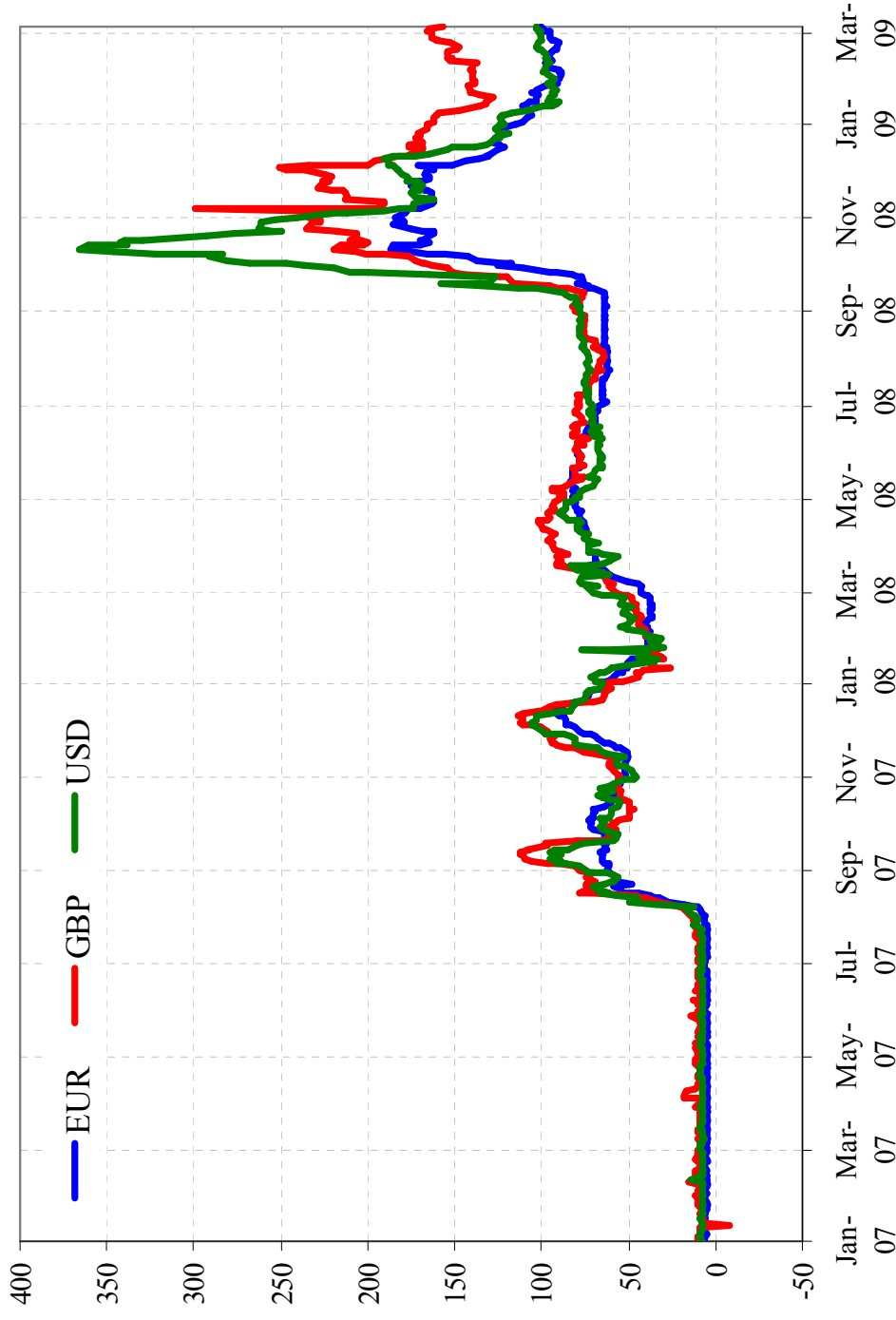


Euro liquidity operations : outstanding amounts



4. An international issue

3-month spreads between overnight swap and LIBOR rates



4. An international issue

- with common features and cooperation -

- **Has been addressed also via international cooperation between central banks:**
 - **Swap (and repo) arrangements**
- **Interbank money market measures are similar:**
 - **More and longer operations**
 - **Larger list of collateral**
 - **Larger counterparties**

4. An international issue - with common features and cooperation -

Trends in **simplified balance sheet of US Fed** similar to Eurosystem

26/02/2009 (27 June 2007), USD billions

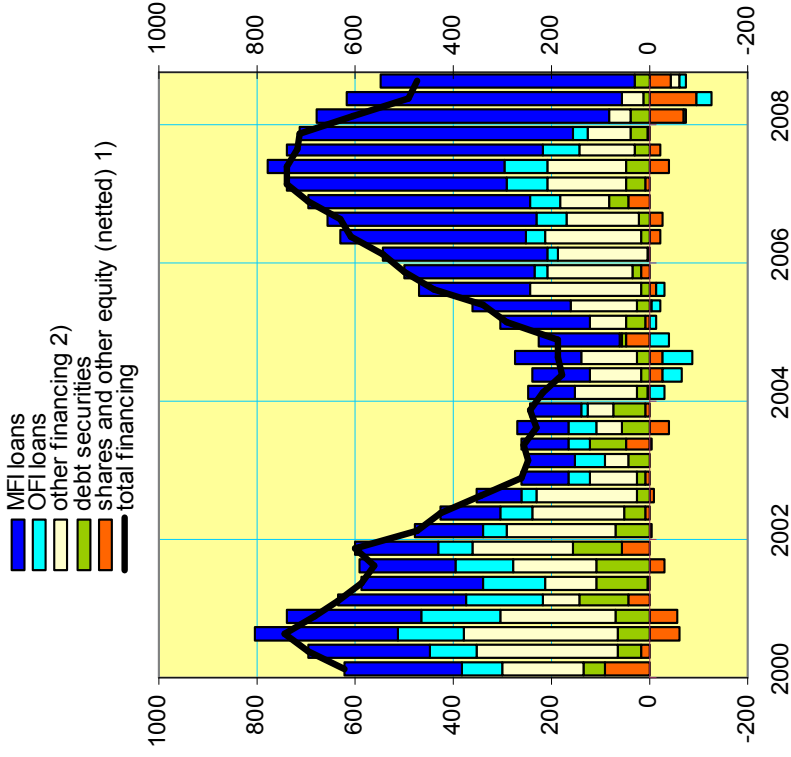
Assets		Liabilities	
Central bank liquidity swaps	375	(0)	
Autonomous liquidity factors		Autonomous liquidity factors	
Net foreign assets	38	(34)	859 (775)
Domestic assets	582	(790)	25 (4)
		Other autonomous factors (net)	43 (19)
Monetary policy instruments		Monetary policy instruments	
Repos	0	(20)	701 (16)
TAF	448	(0)	68 (30)
Lending	454	(0)	Treasury suppl. financing account 200 (0)
Total	1,896	(845)	Total 1,896 (845)

4. An international issue - but also important differences... -

For instance, **difference in financial market structure is exemplified by financing of NFC in the euro area and U.S**

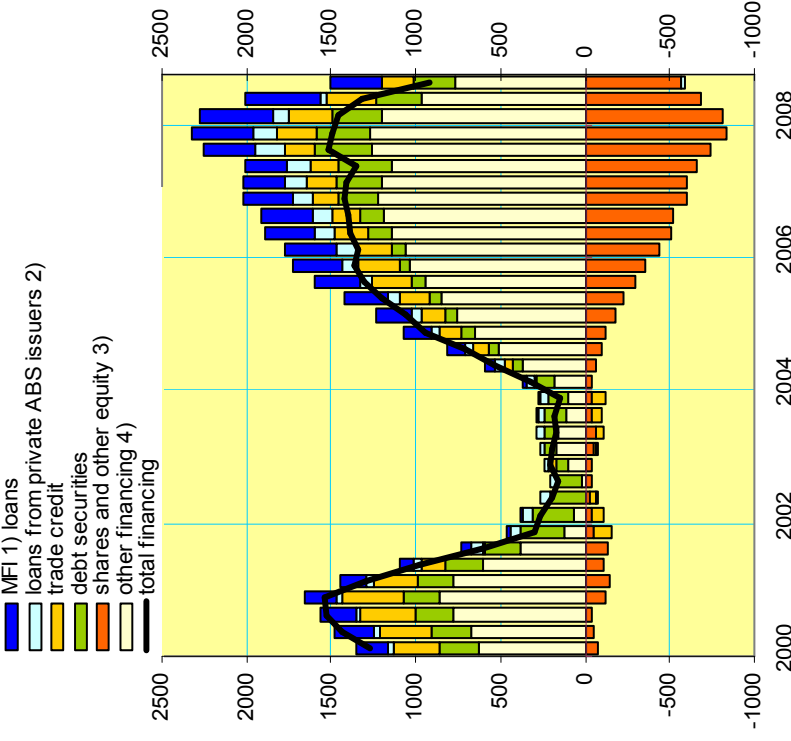
Euro area

(four-quarter moving sum of transactions, EUR bn)



United States

(four-quarter moving sum of transactions, USD bn)



4. An international issue

- but also important differences... -

...Further examples of differences (comparing **Eurosystem** to US Fed):

Different state of the Economy

- Policy rate at **1.5%** versus **0 – 0.25%**
- *Different mandates*
- **Single** versus dual
- *Different institutional settings*
- **Financial independence** versus **financial integration** with the government
- **Many governments** versus **one single government**



QUESTIONS / DISCUSSION WELCOME



BACKGROUND SLIDES

I. The Eurosystem's instruments

Main refinancing operations (MROs)

Details

- **reverse transactions; provide liquidity**
- **Maturity: one week**
- **Frequency: weekly**
- **minimum bid rate applies**

Functions

- **provided the bulk of liquidity to the market**
- **pivotal in steering interest rates (minimum bid rate)**
- **manage the liquidity situation in markets**
- **signal the stance of the monetary policy**

I. The Eurosystem's instruments Longer Term Refinancing Operations (LTROs)

Details

- **reverse transactions; provide liquidity**
- **Maturity: three months**
- **Frequency: monthly**
- **1 and 6 month operations during the turmoil**

Functions

- **Provision of additional longer-term refinancing to the financial sector**
- **Before the crisis: 1/3rd of the global refinancing volume**
- **Not intended to send signals to the market**
- **Eurosystem acts as a rate taker**

I. The Eurosystem's instruments Fine Tuning Operations (FTOs)

Details

- **Provision or absorption of liquidity**
- **Provision: via reverse transactions or foreign exchange swaps**
- **Absorption: via reverse transactions, collection of fixed term deposits or foreign exchange swaps**
- **no fixed frequency**

Functions

- **Smooth the effects on interest rates caused by unexpected liquidity fluctuations in the market**

I. The Eurosystem's instruments

Minimum reserves

Details

- **Reserve base: Liabilities (deposits + debt securities with maturity \leq two years) of Euro area banks**
- **Reserve ratio: 2%**
- **Remuneration: linked to the MRO marginal rate**
- **Averaging mechanism (in general 4 to 5 weeks)**
 - **Aligned with Governing Council meetings**
 - **Rates are not changed within a maintenance period**

Functions

- **Stabilization of money market interest rates**
- **Enlargement of structural liquidity shortage**
- **Not monetary control**

I. The Eurosystem's instruments Standing Facilities (SFs)

Details

- Are at any time accessible to eligible counterparties
- Two types of facilities:
 - Marginal Lending Facility (MLF): providing liquidity overnight
 - Deposit Facility (DF): absorbing liquidity overnight
- Liquidity source of last resort: penalty rate (minimum bid rate +/- 100 basis points)

Function

- corridor for overnight interest rate