

1. Prices of financial assets and i

- Justifications of the inverse relationship
 - financial arbitrage
 - prices of financial assets as present values
 - equalization of rates of return

2. Central bank

- Monetary authority of an economy
- Monetary policy instruments
 - Open market operations
 - Standing facilities: lending / deposit
 - Reserve requirements
 - Policy interest rate
 - Credit controls
- Tension between controlling i and M1

3. European Central Bank

- Eurosystem = ECB + 19 national central banks of Eurozone members
- Primary objective: price stability
- Secondary objective: financial stability
- Decision making bodies
 - Governing Council
 - Executive Board
 - General Council





The Eurozone

as from 1 Jan 2015



European Union

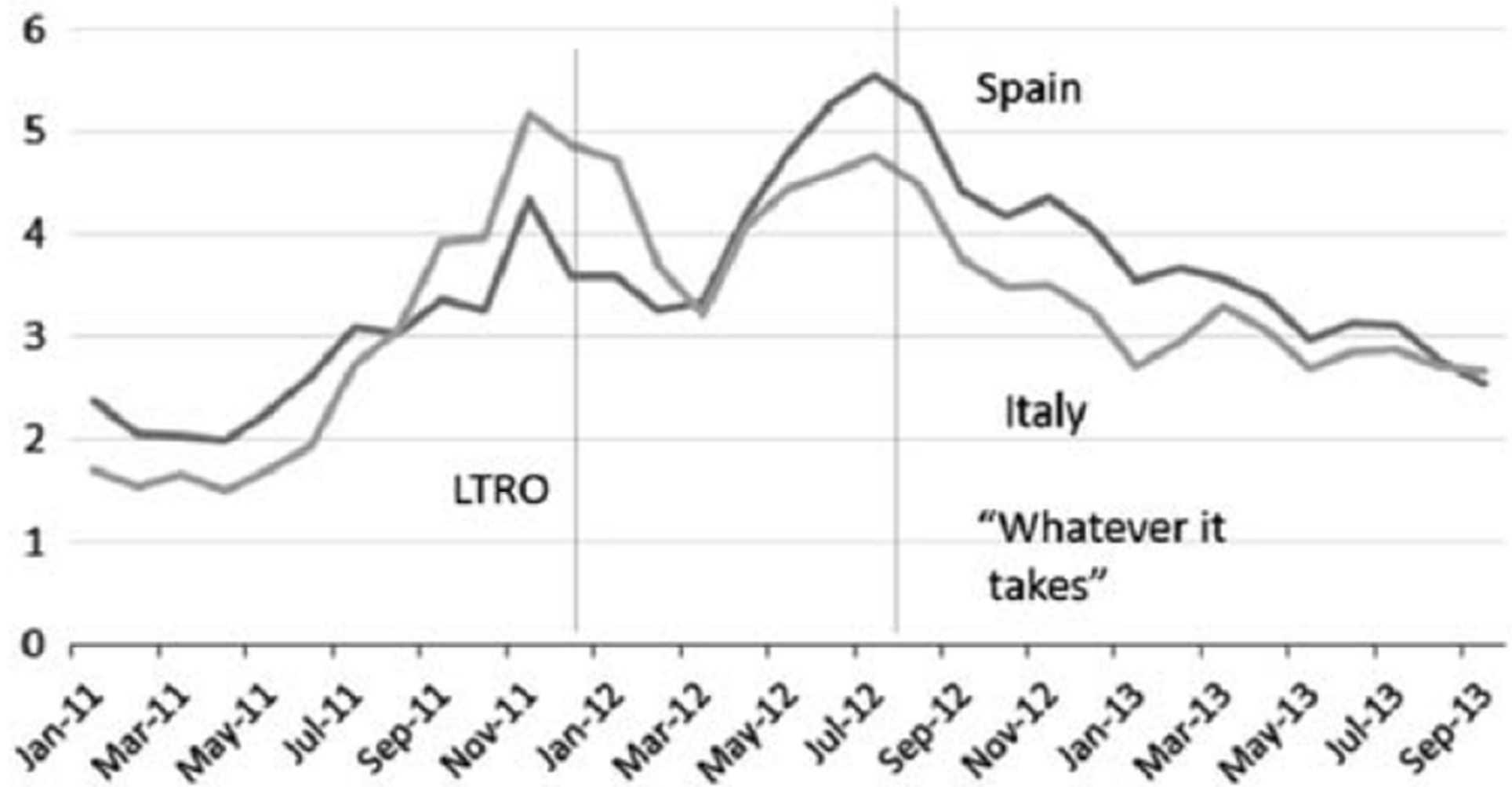
(13 Feb 2015)

-  Member states
-  Candidates
-  Applicants
-  Potential candidates

-  Austria €
-  Belgium €
-  Bulgaria
-  Croatia
-  Cyprus €
-  Czech Republic
-  Denmark
-  Estonia €
-  Finland €
-  France €
-  Germany €
-  Greece €
-  Hungary
-  Ireland €
-  Italy €
-  Latvia €
-  Lithuania €
-  Luxembourg €
-  Malta €
-  Netherlands €
-  Poland
-  Portugal €
-  Romania
-  Slovakia €
-  Slovenia €
-  Spain €
-  Sweden
-  United Kingdom

http://en.wikipedia.org/wiki/European_Union

Figure 3. Spreads against Germany in Southern Europe



ECB Executive Board

Consists of six members, including the President (Mario Draghi) and the Vice-President.

Feb 2014



<http://www.ecb.int/ecb/orga/decisions/eb/html/index.en.html>

ECB Governing Council

Consists of the six members of the Executive Board plus the 19 governors of the national central banks of the 19 euro area countries.

Jan 2015



Luis
María
Linde

ECB General Council

Consists of the President and the Vice-President of the ECB plus the governors of the national central banks of the 28 EU Member States.

Jan 2015



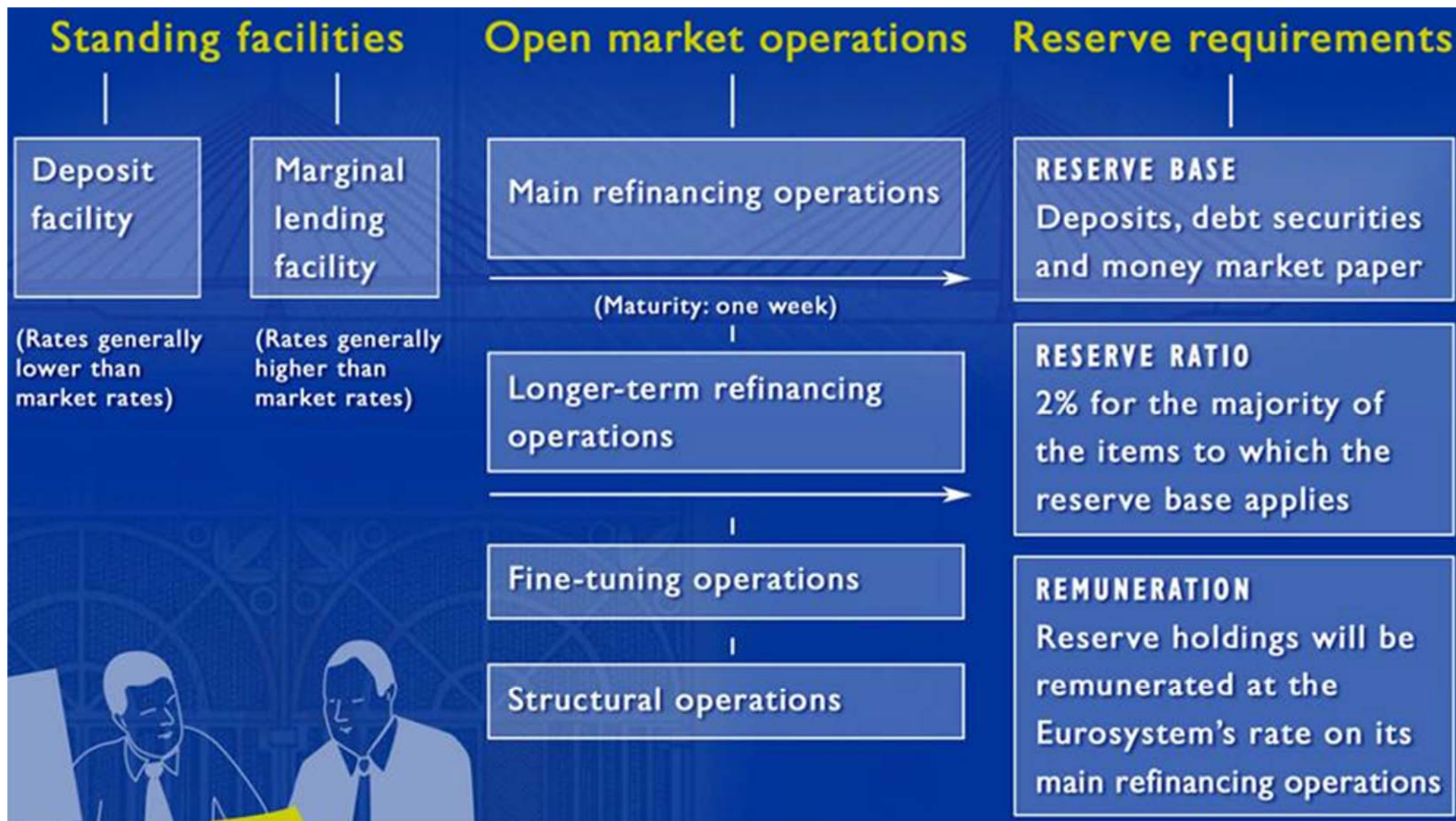
Luis
María
Linde

Mark Carney, Mugur Constantin Isărescu, György Matolcsy, Ilmārs Rimšēvičs, Miroslav Singer, and Yannis Stournaras were not available at the time the photograph was taken.

<http://www.ecb.int/ecb/orga/decisions/genc/html/index.en.html>

4. Monetary tools of the ECB

- Main refinancing operations
 - fixed rate tender
 - variable rate tender
- Standing facilities: lending / deposit
- Policy interest rate
- Reserve requirements

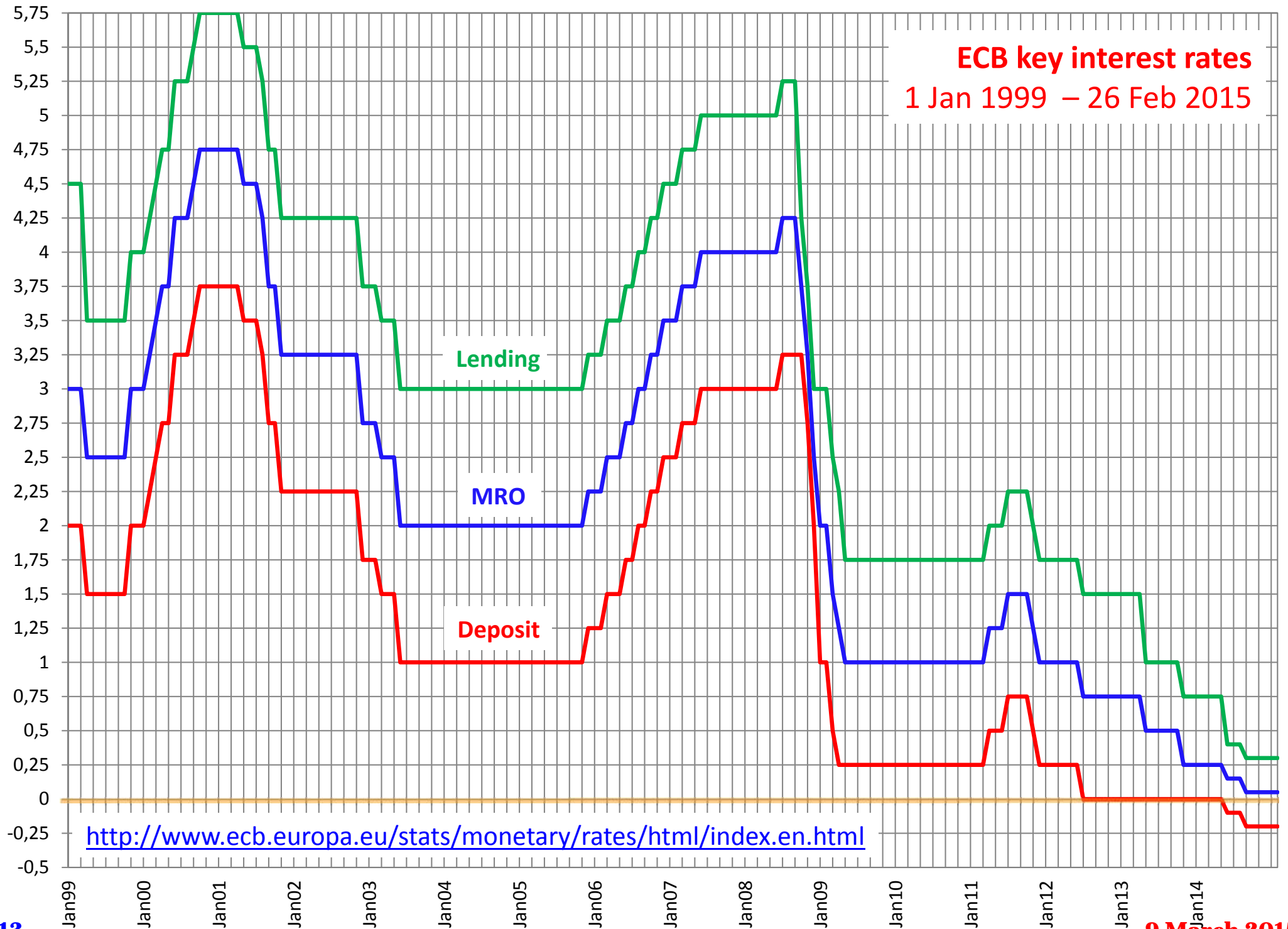


Monetary policy instruments of the European Central Bank

http://www.ecb.int/ecb/educational/shared/img/presentation_mp.en.zip

<u>Name of interest rate</u>	13 Feb 2015	<u>country/region</u>	<u>current rate</u>	<u>direction</u>	<u>previous rate</u>	<u>change</u>
American interest rate FED		United States	0.250 %	↓	1.000 %	12-16-2008
Australian interest rate RBA		Australia	2.250 %	↓	2.500 %	02-03-2015
Banco Central interest rate		Chile	3.000 %	↓	3.250 %	10-16-2014
Bank of Korea interest rate		South Korea	2.000 %	↓	2.250 %	10-15-2014
Brazilian interest rate BACEN		Brazil	12.250 %	↑	11.750 %	01-21-2015
British interest rate BoE		Great Britain	0.500 %	↓	1.000 %	03-05-2009
Canadian interest rate BOC		Canada	0.750 %	↓	1.000 %	01-21-2015
Chinese interest rate PBC		China	5.600 %	↓	6.000 %	11-21-2014
Czech interest rate CNB		Czech Republic	0.050 %	↓	0.250 %	11-01-2012
Danish interest rate Nationalbanken		Denmark	0.050 %	↓	0.200 %	01-19-2015
European interest rate ECB		Europe	0.050 %	↓	0.150 %	09-04-2014
Hungarian interest rate		Hungary	2.100 %	↓	2.300 %	07-22-2014
Indian interest rate RBI		India	7.750 %	↓	8.000 %	01-15-2015
Indonesian interest rate BI		Indonesia	7.750 %	↑	7.500 %	11-18-2014
Israeli interest rate BOI		Israel	0.250 %	↓	0.500 %	08-25-2014
Japanese interest rate BoJ		Japan	0.100 %	↓	0.100 %	10-05-2010
Mexican interest rate Banxico		Mexico	3.000 %	↓	3.500 %	06-06-2014
New Zealand interest rate		New Zealand	3.500 %	↑	3.250 %	07-24-2014
Norwegian interest rate		Norway	1.250 %	↓	1.500 %	12-11-2014
Polish interest rate		Poland	2.000 %	↓	2.500 %	10-08-2014
Russian interest rate CBR		Russia	15.000 %	↓	17.000 %	01-30-2015
Saudi Arabian interest rate		Saudi Arabia	2.000 %	↓	2.500 %	01-19-2009
South African interest rate SARB		South Africa	5.750 %	↑	5.500 %	07-17-2014
Swedish interest rate Riksbank		Sweden	0.000 %	↓	0.250 %	10-28-2014
Swiss interest rate SNB		Switzerland	-0.750 %	↓	-0.500 %	01-15-2015
Turkish interest rate CBRT		Turkey	7.750 %	↓	8.250 %	01-20-2015

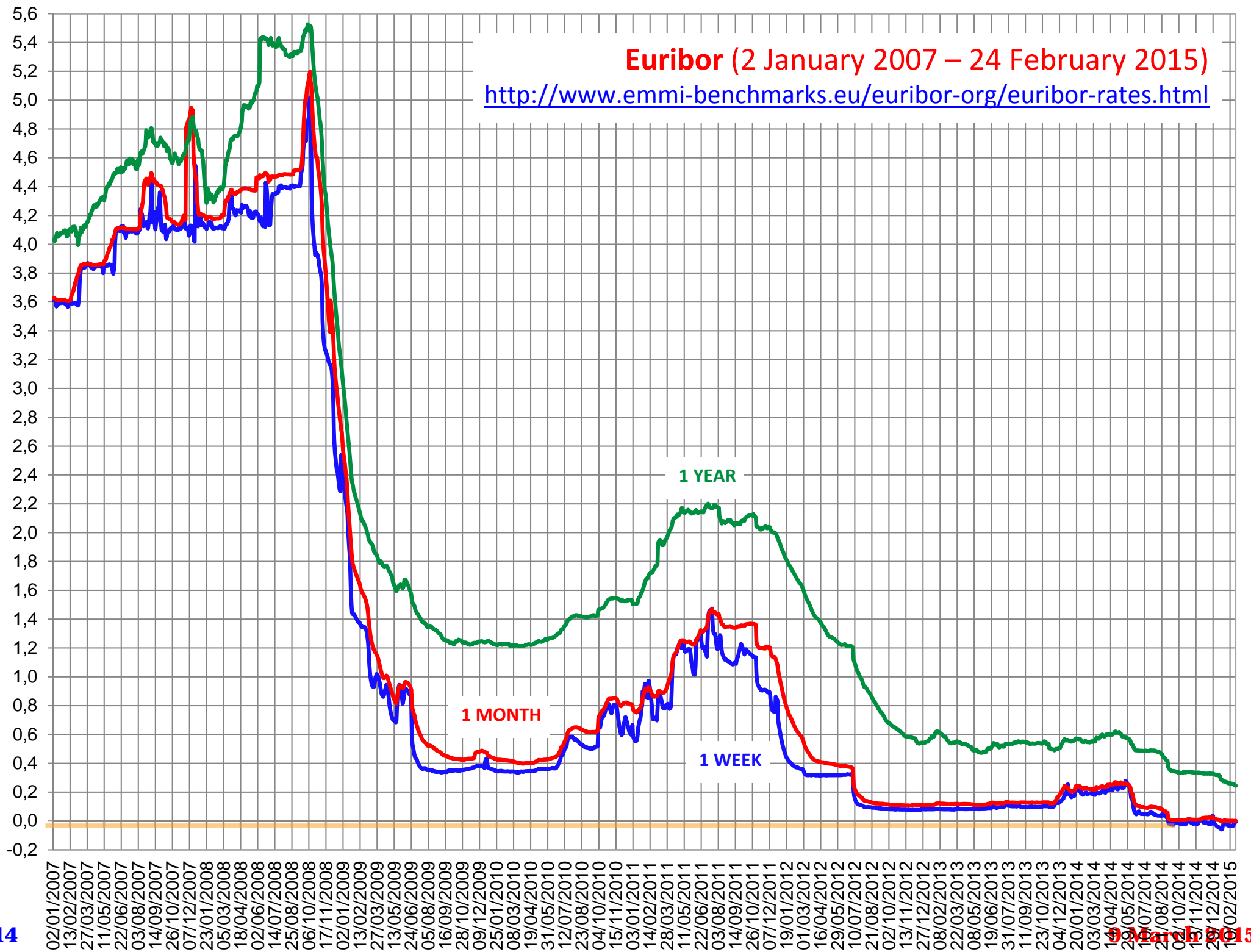
ECB key interest rates
1 Jan 1999 – 26 Feb 2015



<http://www.ecb.europa.eu/stats/monetary/rates/html/index.en.html>

Euribor (2 January 2007 – 24 February 2015)

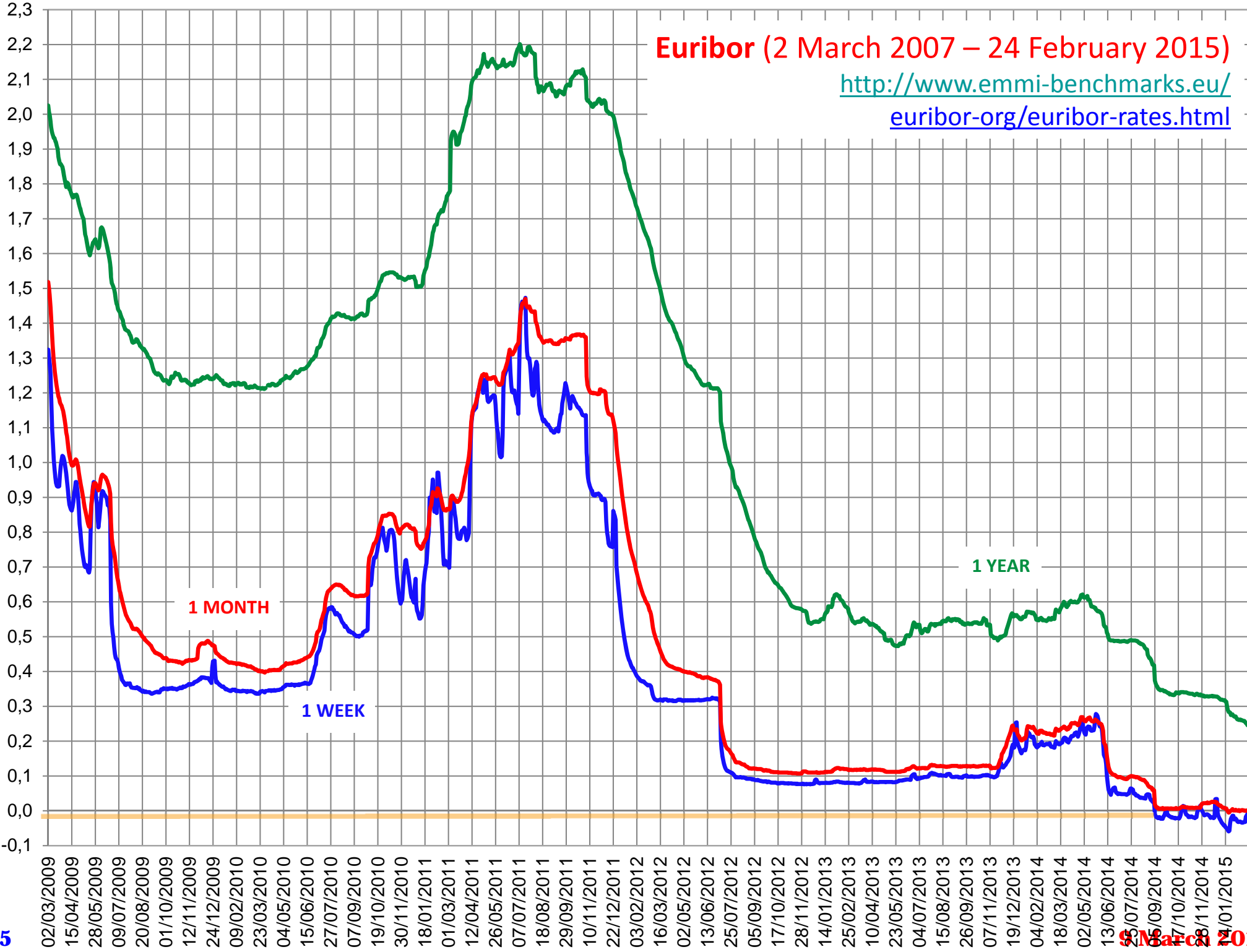
<http://www.emmi-benchmarks.eu/euribor-org/euribor-rates.html>



Euribor (2 March 2007 – 24 February 2015)

<http://www.emmi-benchmarks.eu/>

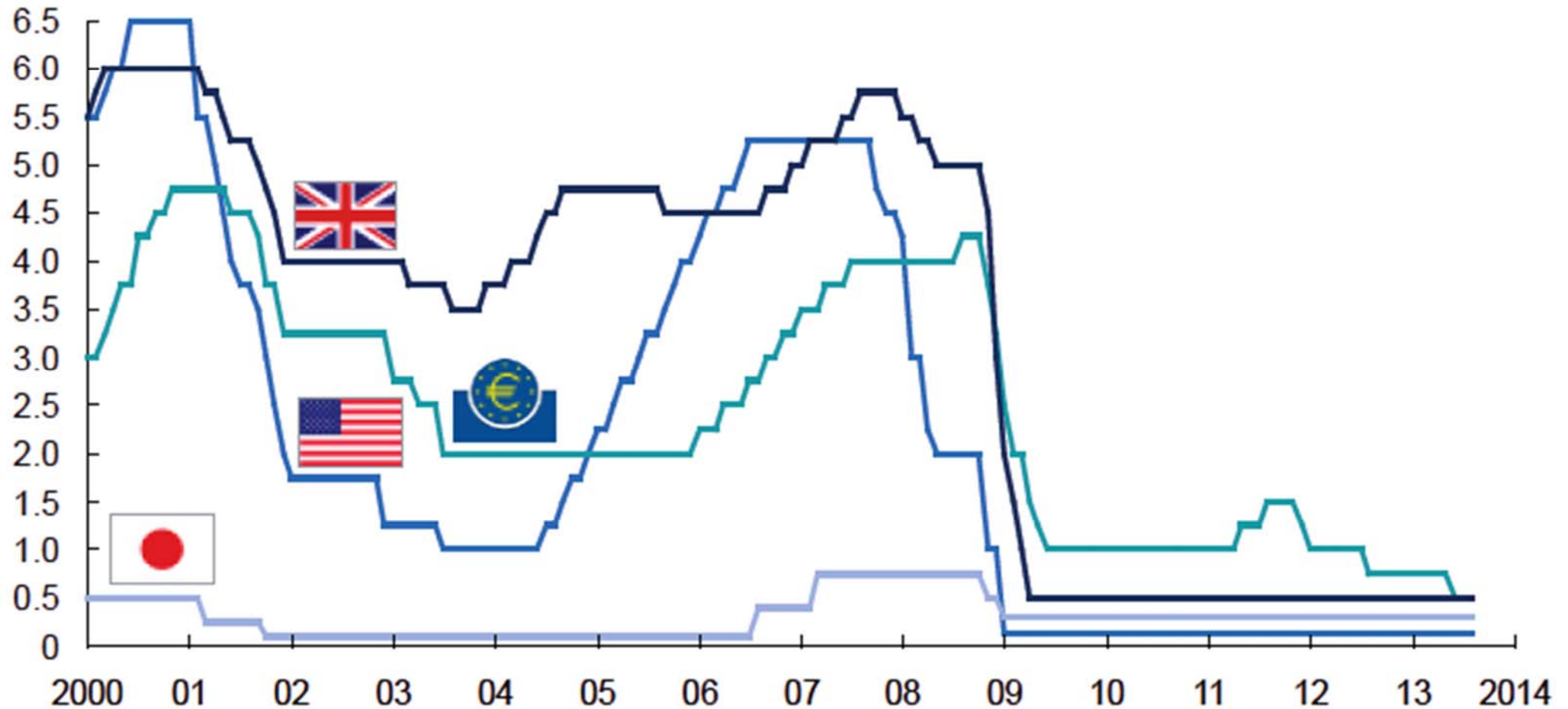
euribor-org/euribor-rates.html



Central banks pushed policy rates to ultra-low levels in 2009 and have held them there since

Main policy rates
%

- United States
- Eurozone
- United Kingdom
- Japan



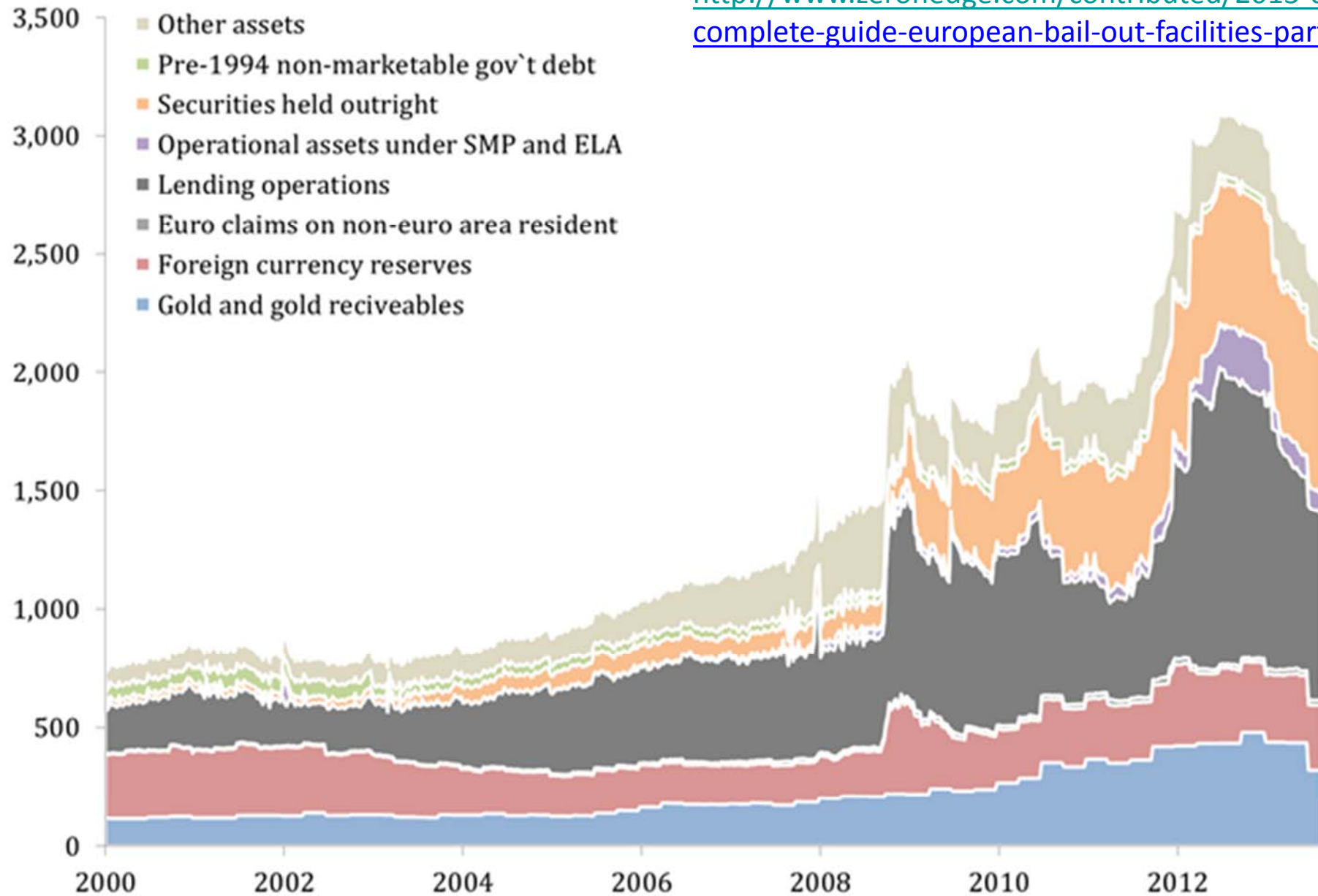
SOURCE: US Federal Reserve; European Central Bank; Bank of England; Bank of Japan; McKinsey Global Institute analysis

http://www.mckinsey.com/insights/economic_studies/ge_and_ultra_low_interest_rates_distributional_effects_and_risks

<i>i</i>	<i>bids by banks</i>		<i>total bids</i>	<i>cumulative bids</i>	<i>allotment</i>		
	B1	B2			B1	B2	
5%	7	3	10	10	7	3	
4%	10	20	30	40	10	20	
3%	20	30	50	90	$20 \cdot 60\% = 12$	$30 \cdot 60\% = 18$	
2%	40	70	110	200	–	–	
Total The ECB wants to supply 70					29	41	70

ECB balance sheet; assets

Eur bn



<http://www.zerohedge.com/contributed/2013-09-03/complete-guide-european-bail-out-facilities-part-1-ecb>

Refinancing operations (MRO & LTRO)

