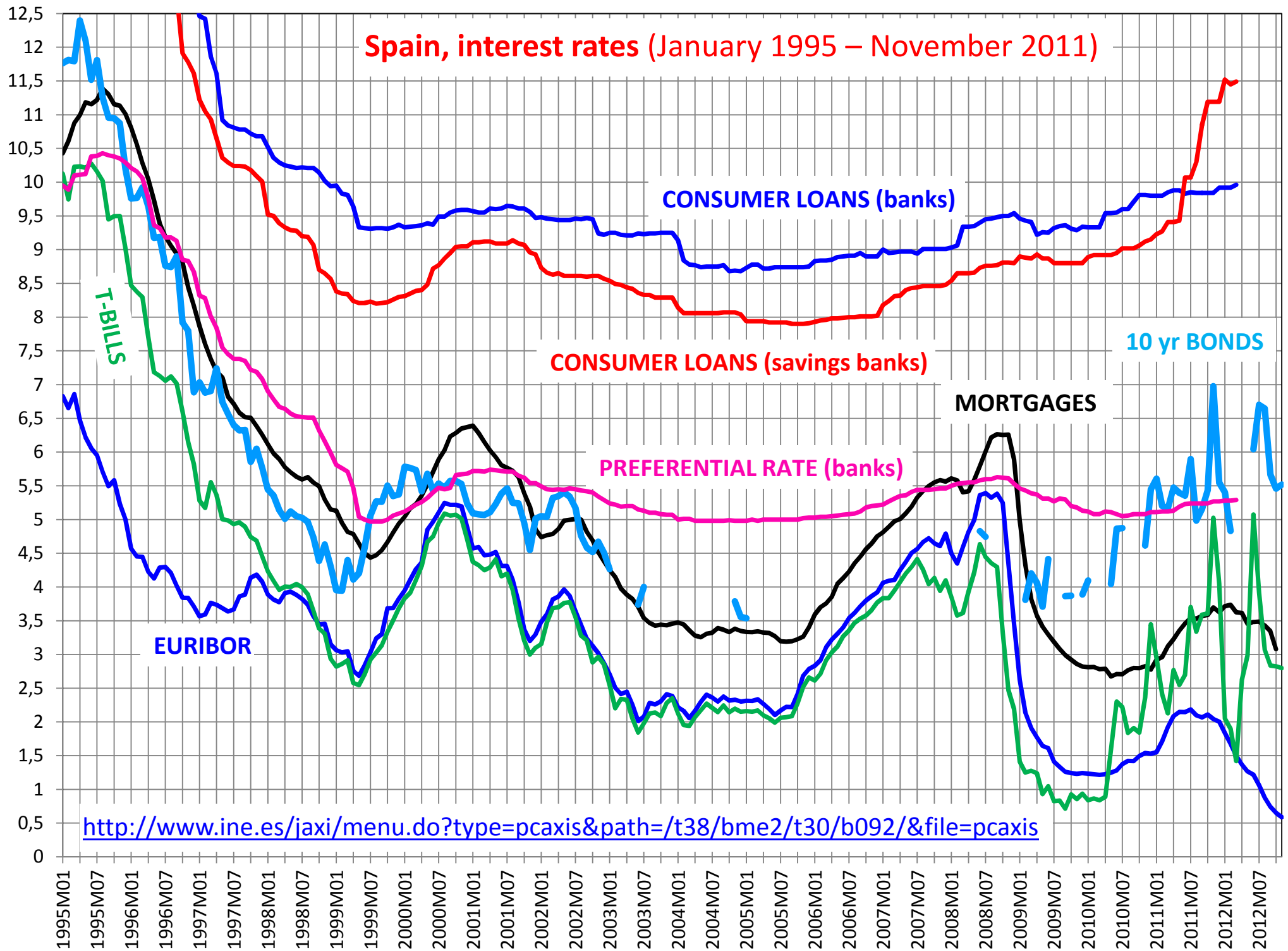
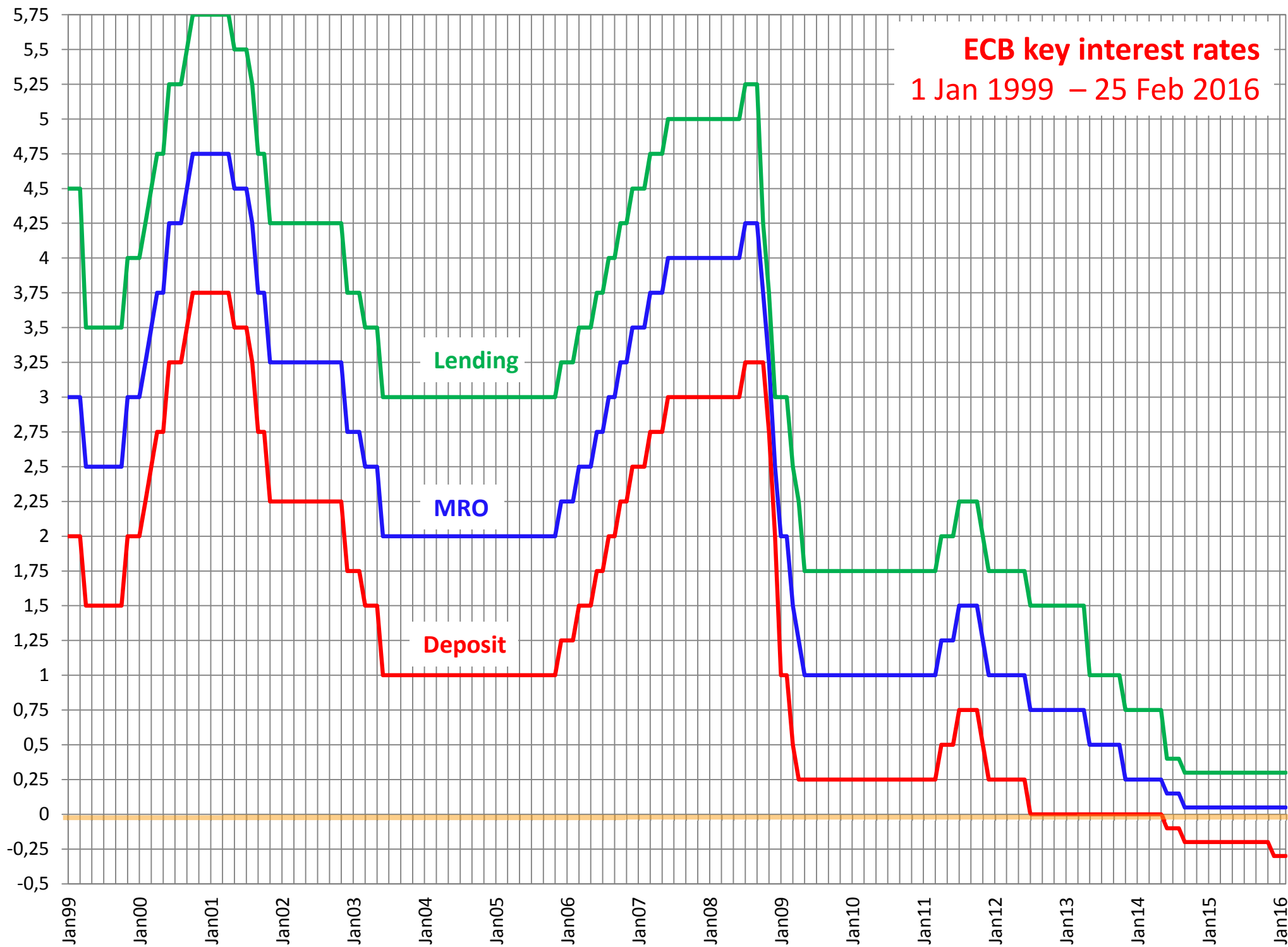


Spain, interest rates (January 1995 – November 2011)

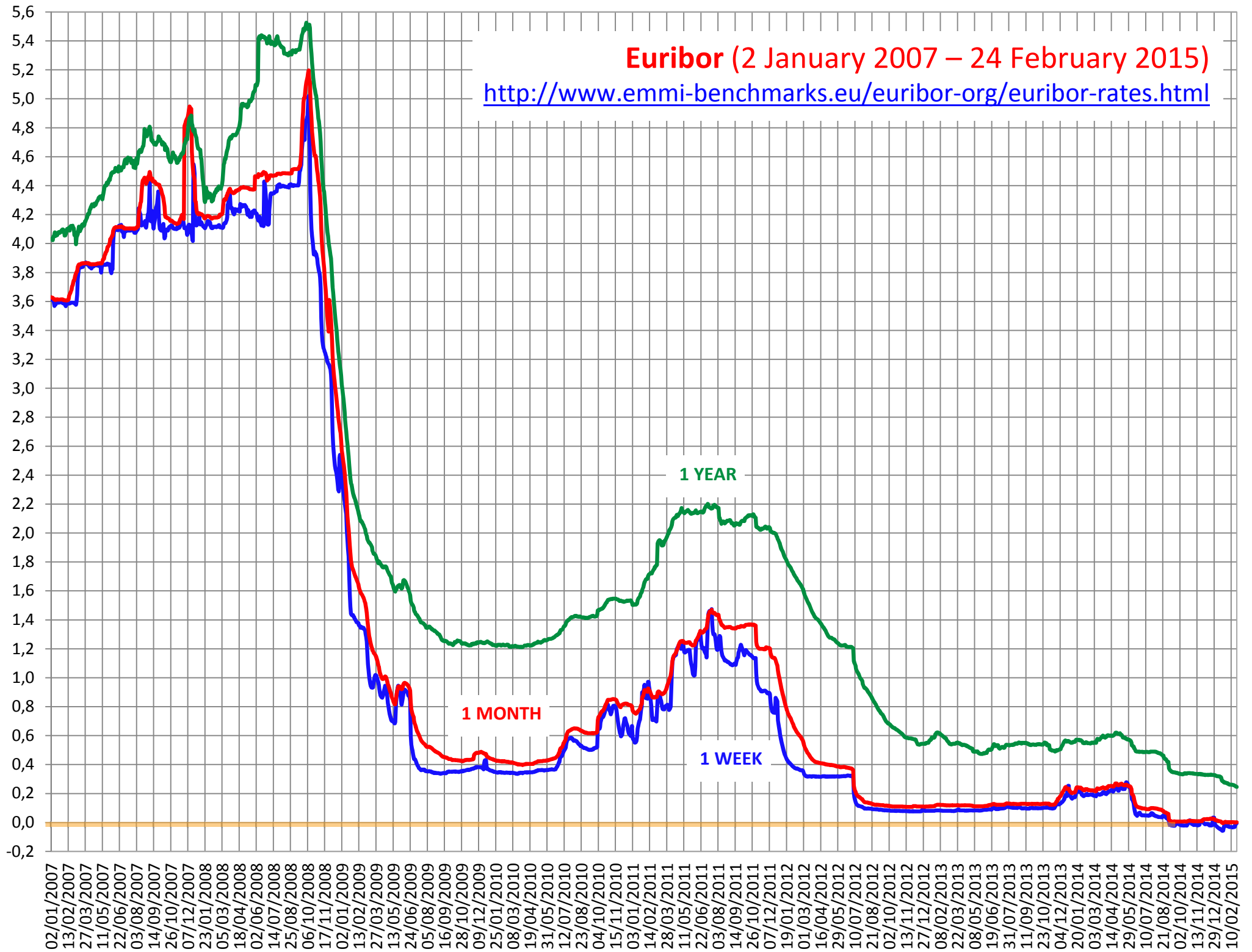


ECB key interest rates
1 Jan 1999 – 25 Feb 2016



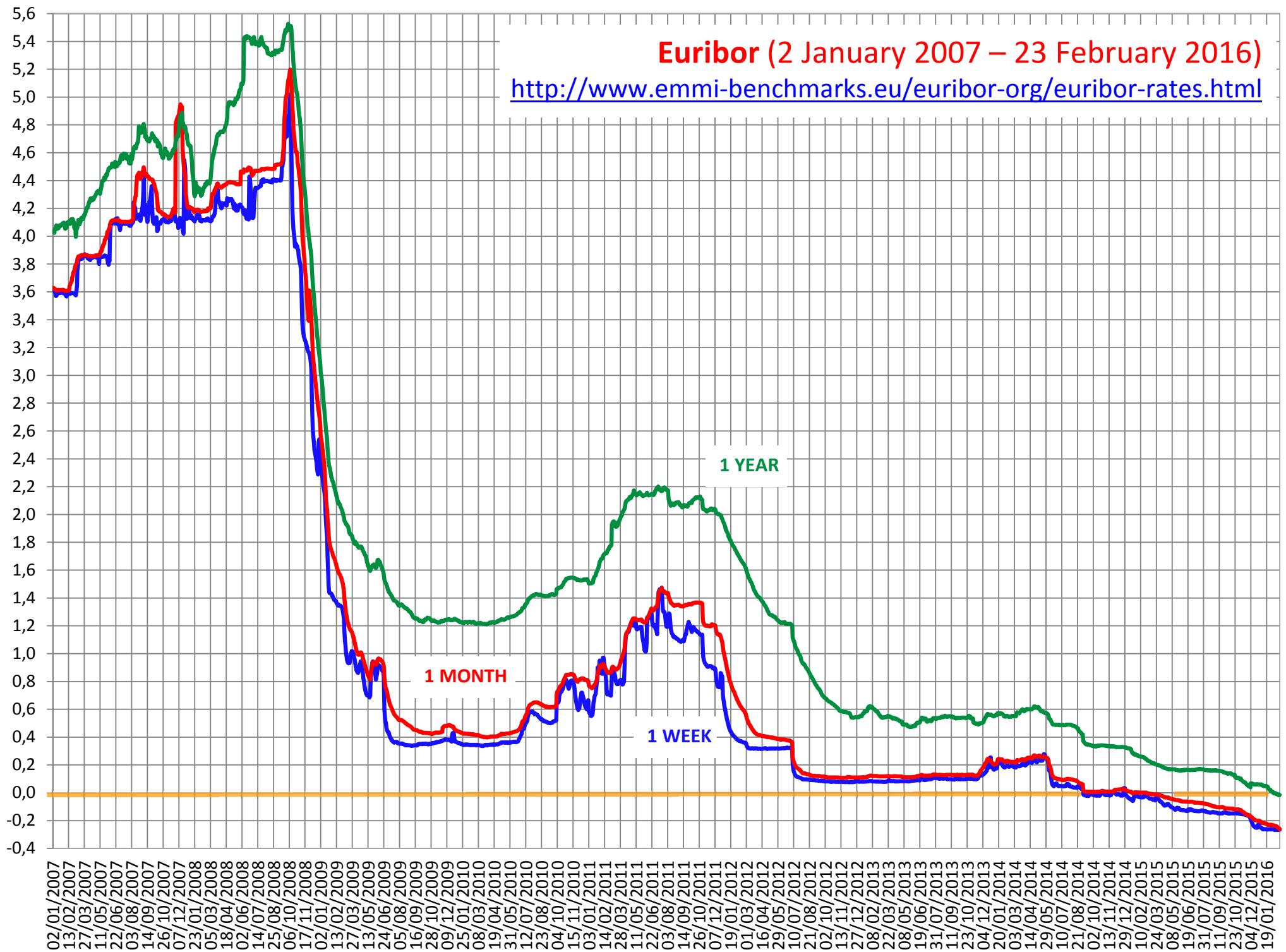
Euribor (2 January 2007 – 24 February 2015)

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



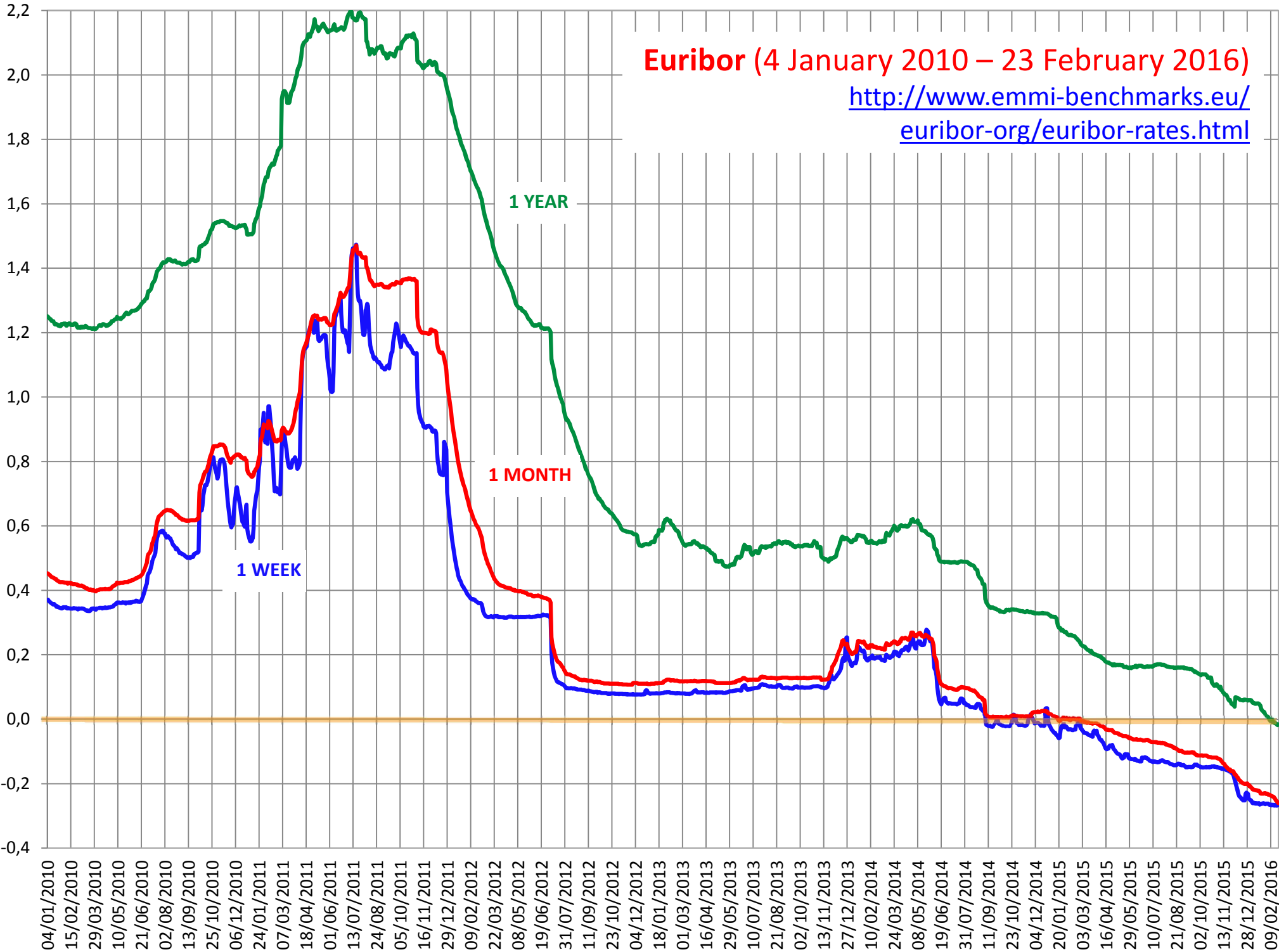
Euribor (2 January 2007 – 23 February 2016)

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



Euribor (4 January 2010 – 23 February 2016)

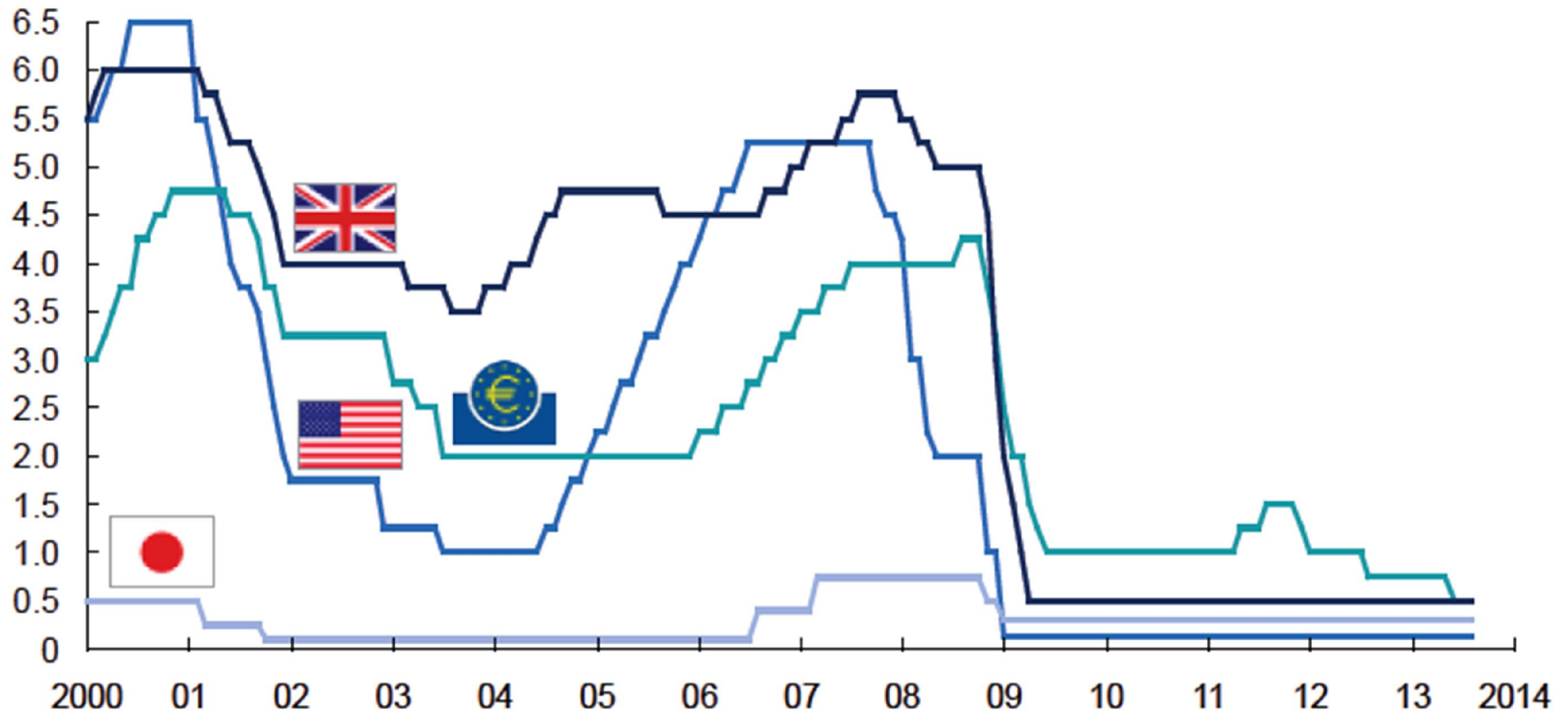
<http://www.emmi-benchmarks.eu/euribor-org/euribor-rates.html>



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

The Eurozone

as from 1 Jan 2015

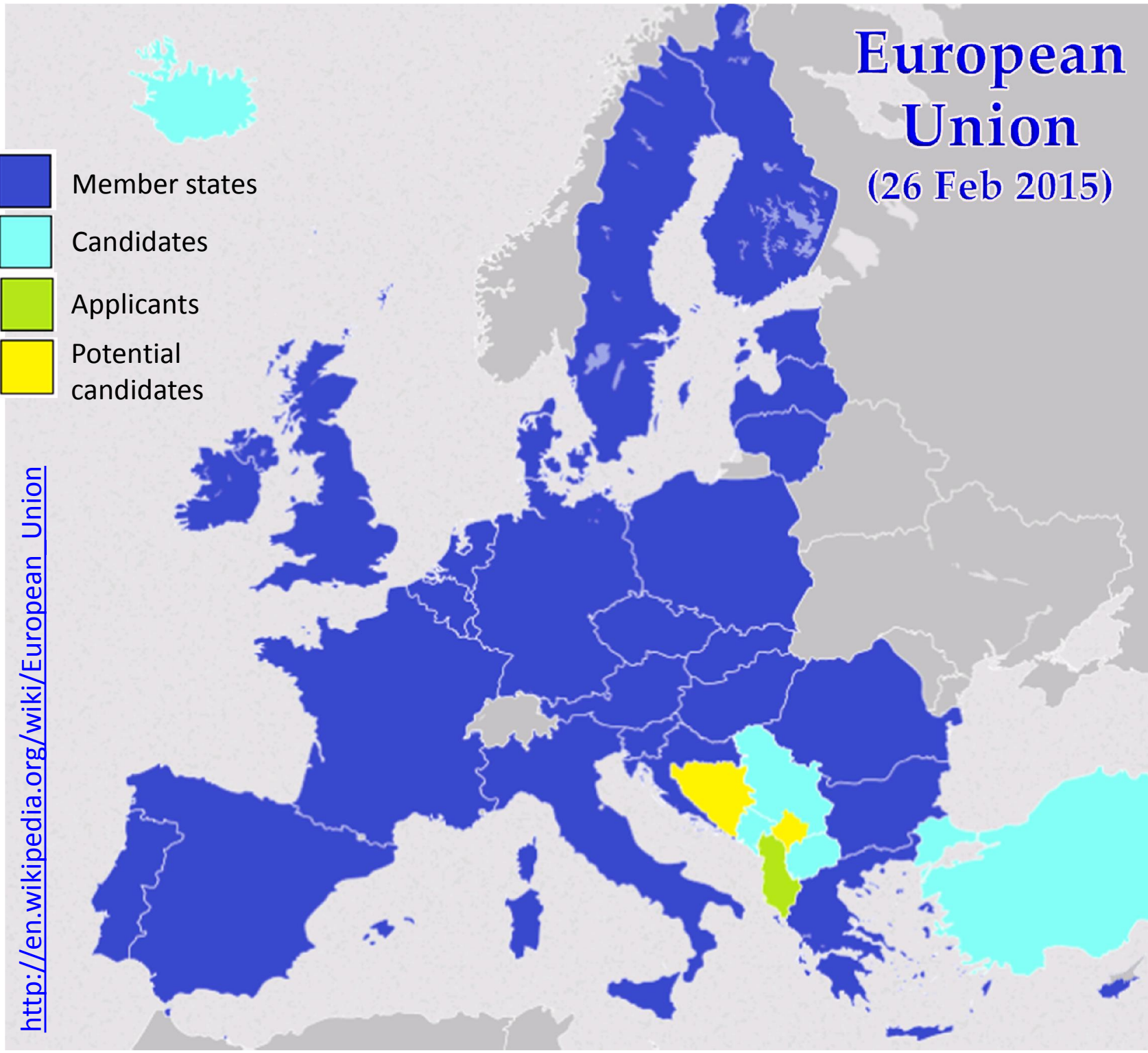


European Union (26 Feb 2015)

- 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



ECB Executive Board

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

Feb 2014



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.

Luis
María
Linde

Jan 2016



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.

Luis
María
Linde

Jan 2016





Monetary policy instruments of the European Central Bank

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

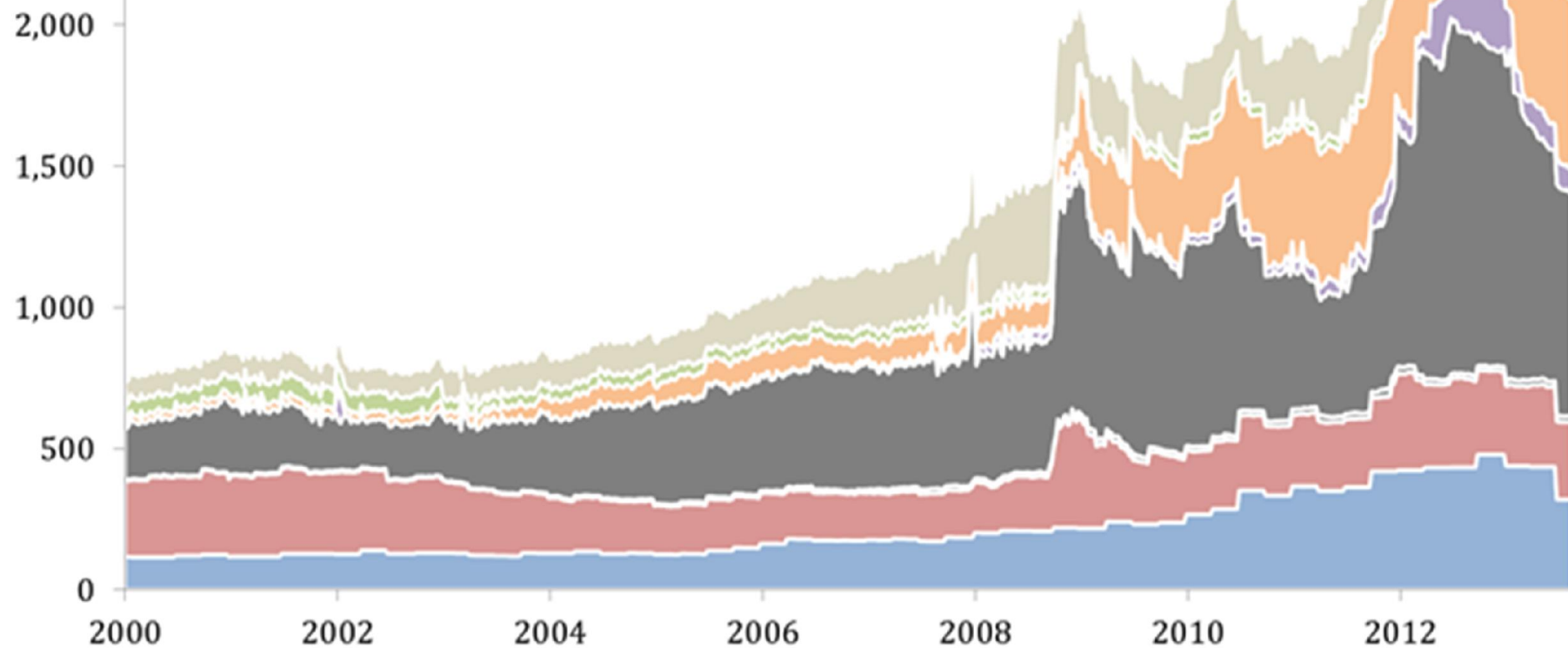
<i>i</i>	<i>bids by banks</i>		<i>total bids</i>	<i>cumulative bids</i>	<i>allotment</i>		
	B1	B2			B1	B2	
5%	7	3	10	10	7	3	
4%	10	20	30	40	10	20	
3%	20	30	50	90	$20 \cdot 60\% = 12$	$30 \cdot 60\% = 18$	
2%	40	70	110	200	–	–	
Total The ECB wants to supply 70					29	41	70

ECB balance sheet; assets

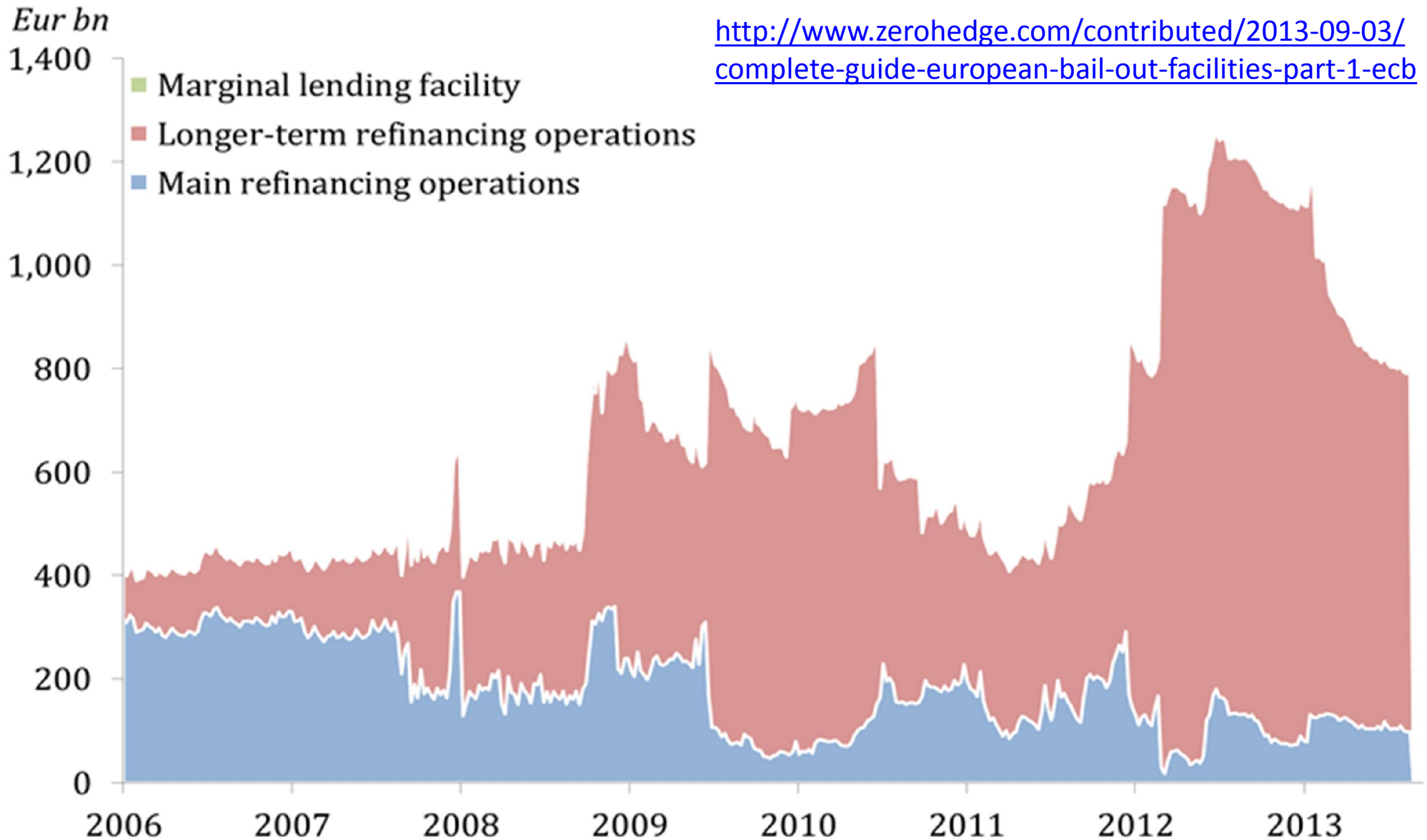
Eur bn



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



Refinancing operations (MRO & LTRO)



Booms and Busts

Robert Menschel (2002): *Markets, Mobs, and Mayhem. A Modern Look at the Madness of Crowds*, p. 47

	<i>% Rise Bull Phase</i>	<i>Length of Bull Phase (months)</i>	<i>% Decline Peak to Trough</i>	<i>Length of Bear Phase (months)</i>
Tulips (1634–1637)				
Netherlands	+5900%	36	−93%	10
Mississippi Shares				
France (1719–1721)	+6200%	13	−99%	13
South Sea Shares				
England (1719–1721)	+1000%	18	−84%	6
American Stocks				
U.S. (1923–1932)	+345%	71	−87%	33
Mexican Stocks				
Mexico (1978–1981)	+785%	30	−73%	18
Silver				
U.S. (1979–1982)	+710%	12	−88%	24
Gulf Stocks				
Kuwait (1978–1986)	+7000%	36	−98%	30
Hong Kong Stocks				
Hong Kong (1970–1974)	+1200%	28	−92%	20
Taiwan Stocks				
Taiwan (1986–1990)	+1168%	40	−80%	12