

# SUERF E-Conference 2020

"How to spend it? How to pay it back?  
EU and US Perspectives"

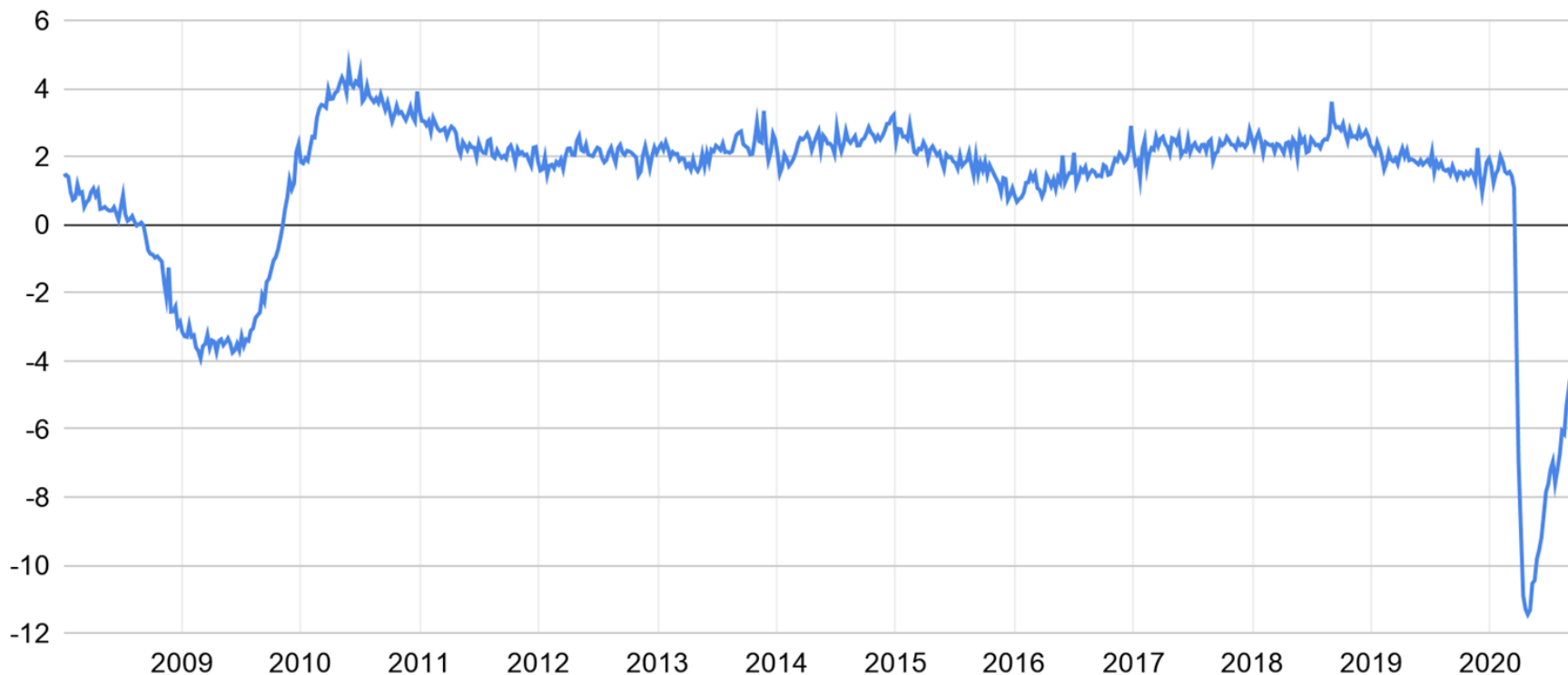
Panel: COVID-19 to climate change: policy responses and future  
challenges

## Central Bank Policy Responses

14 October 2020  
Patricia C. Mosser

# Weekly Economic Index for U.S.

Index of 10 weekly indicators of real economic activity, scaled to have the units of four-quarter percent change of real GDP



Source: Federal Reserve Bank of New York

# 2007-09 and 2020 Federal Reserve Facilities and Tools

## 2007-2009 crisis

Temp. OMOs (repo/reverse repo)*	
Perm. OMOs (Treasury Purchases)*	
Securities lending*	
Discount window*	
TAF	12/07
Central Bank swap lines	12/07
PDCF 13(3)	03/08
TSLF 13(3)	03/08
TOP (TSLF Options) 13(3)	09/08
Agency discount notes	09/08
TAF forwards	10/08
AMLF 13(3)	10/08
CPFF 13(3)	10/08
MMIFF 13(3)	NA
Agency debt purchases	11/08
Agency MBS purchases	01/09
Agency MBS dollar rolls	03/09
TALF 13(3)**	03/09

Monetary policy tools

Liquidity facilities

Targeted lending programs

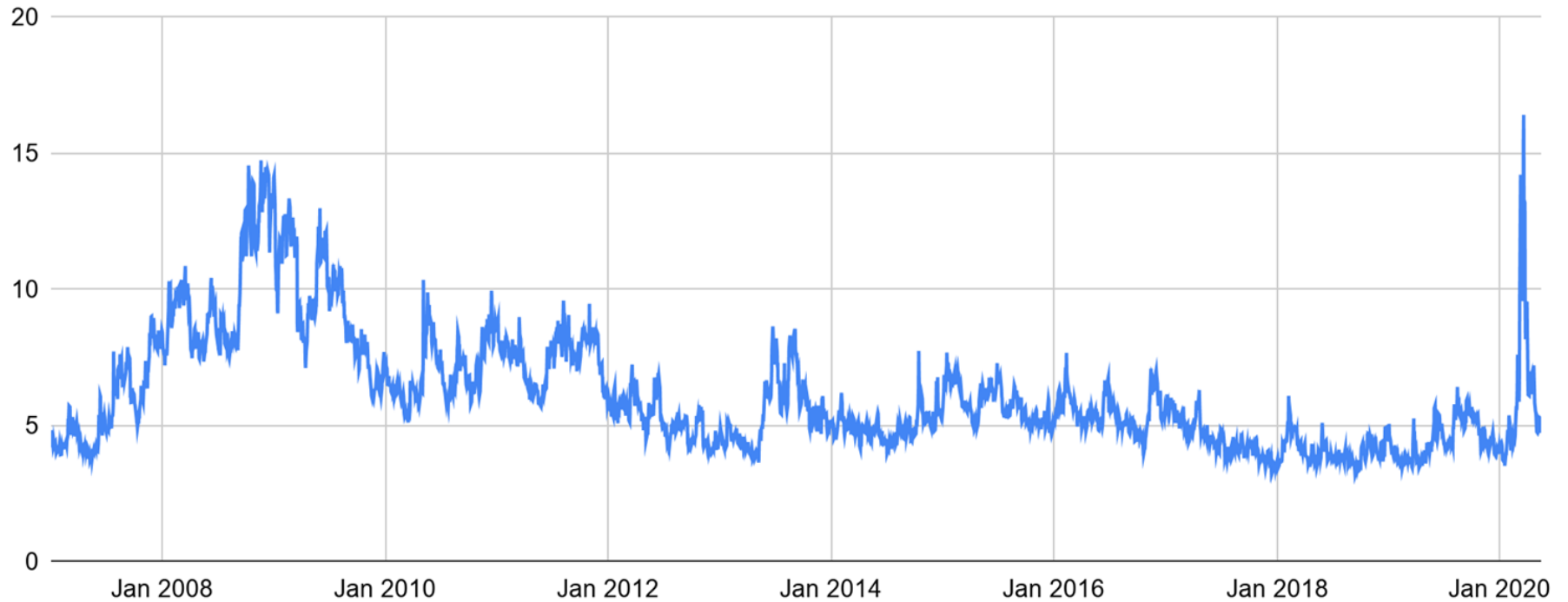
## COVID-19

Temp. OMOs (repo/reverse repo)*	
Perm. OMOs (Treasury Purchases)*	
Securities lending	
Discount window*	
Agency MBS purchases	03/15/20
Agency MBS dollar rolls	03/15/20
CPFF 13(3)**	03/17/20
PDCF 13(3)	03/17/20
MMMLF 13(3)	03/17/20
Extended Central Bank swap lines	03/19/20
TALF (asset backed) 13(3)**	03/23/20
PMCCF (New corp bonds) 13(3)**	03/23/20
SMCCF (Corp bonds) 13(3)**	03/23/20
Agency CMBS purchases	03/23/20
MSNLF (Main street new lending) 13(3)**	03/23/20
FIMA repo	03/31/20
PPP lending facility 13(3)	04/06/20
MSELF (Main street extensions) 13(3)**	04/09/20
Municipal LF (Tax/Rev notes) 13(3)**	04/09/20
MSPriorLF (Main St. priority) 13(3)**	04/30/20
NONLF (Nonprofits, new) 13(3)**	07/06/20
NOELF (Nonprofits, extended) 13(3)**	07/06/20

\* Changes in size, rate and maturity of operations

\*\* Equity (for first loss) provided by USTreasury

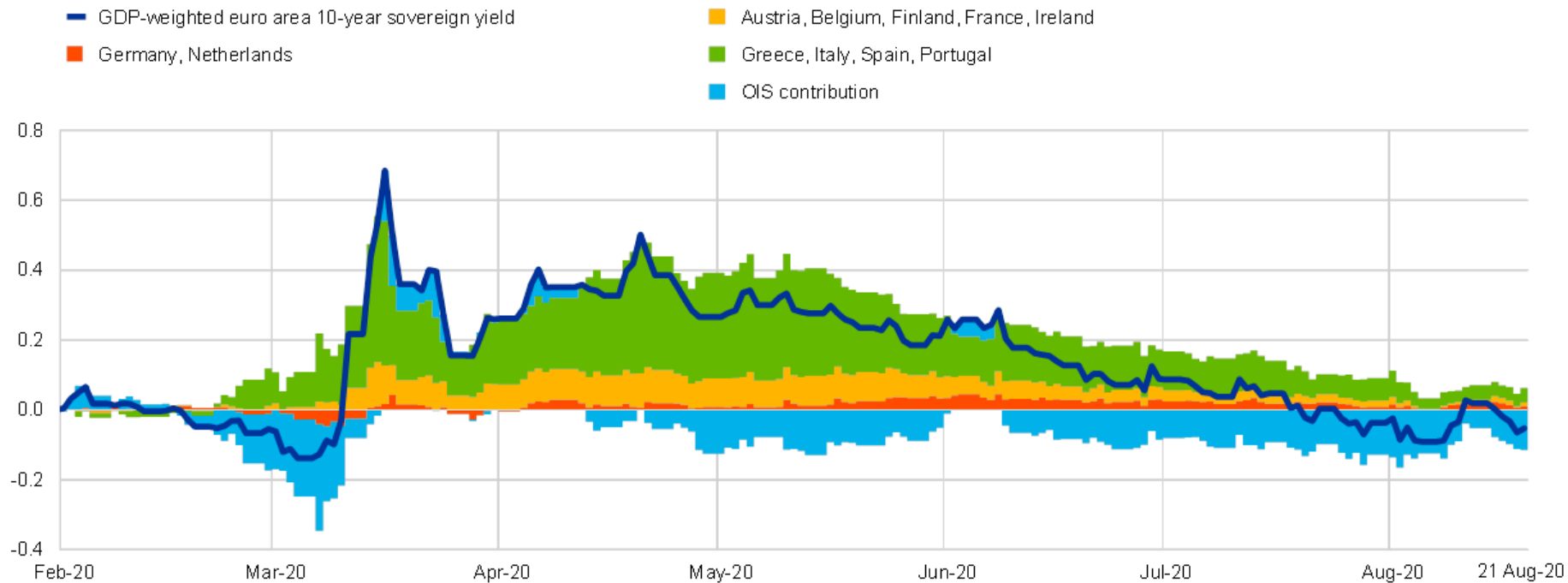
# CBOE 10-Year Treasury Note Volatility Futures



Source: Federal Reserve Bank of St. Louis, FRED, CBOE

# Euro area sovereign yields

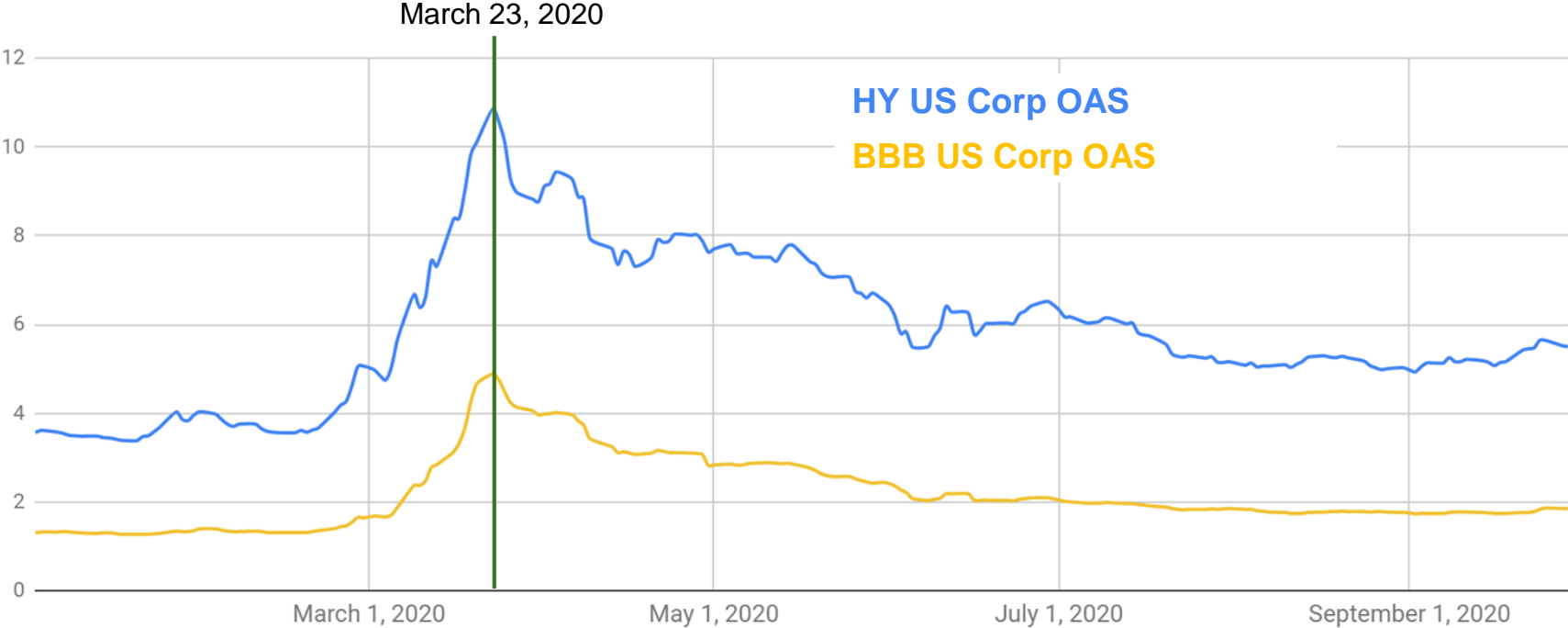
(cumulated changes since 1 February 2020, percentage points)



Source: ECB, "The pandemic emergency: the three challenges for the ECB", Philip Lane, Aug 2020, Jackson Hole.

# Corporate Bond Option Adjusted Spreads to Treasuries

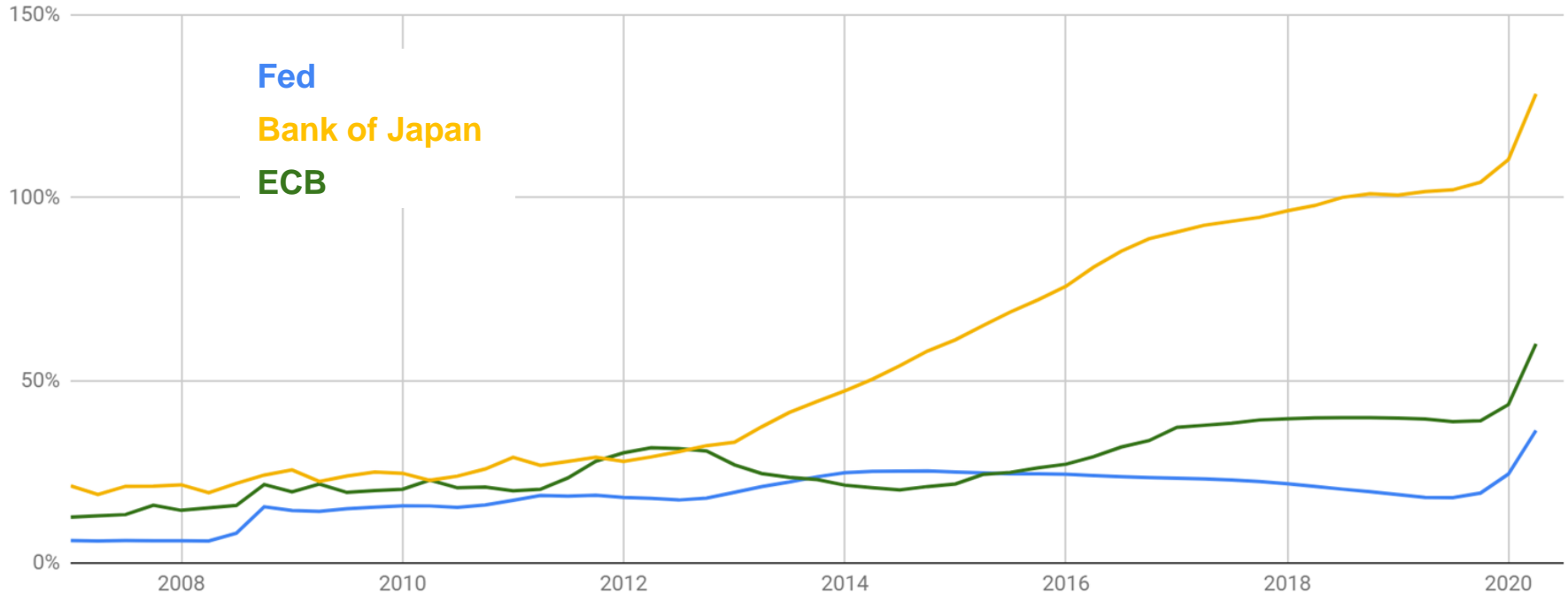
Percent



Source: ICE Bank of America, Federal Reserve Bank of St. Louis FRED

# Central Banks' Balance Sheets

Central Bank Balance Sheets as a % of Nominal GDP



Source: FRED, Federal Reserve Bank of St. Louis, ECB, BOJ