

# Monetary Policy of the European Central Bank driven by the Great Financial Crisis, the Euro Crisis and Pandemic

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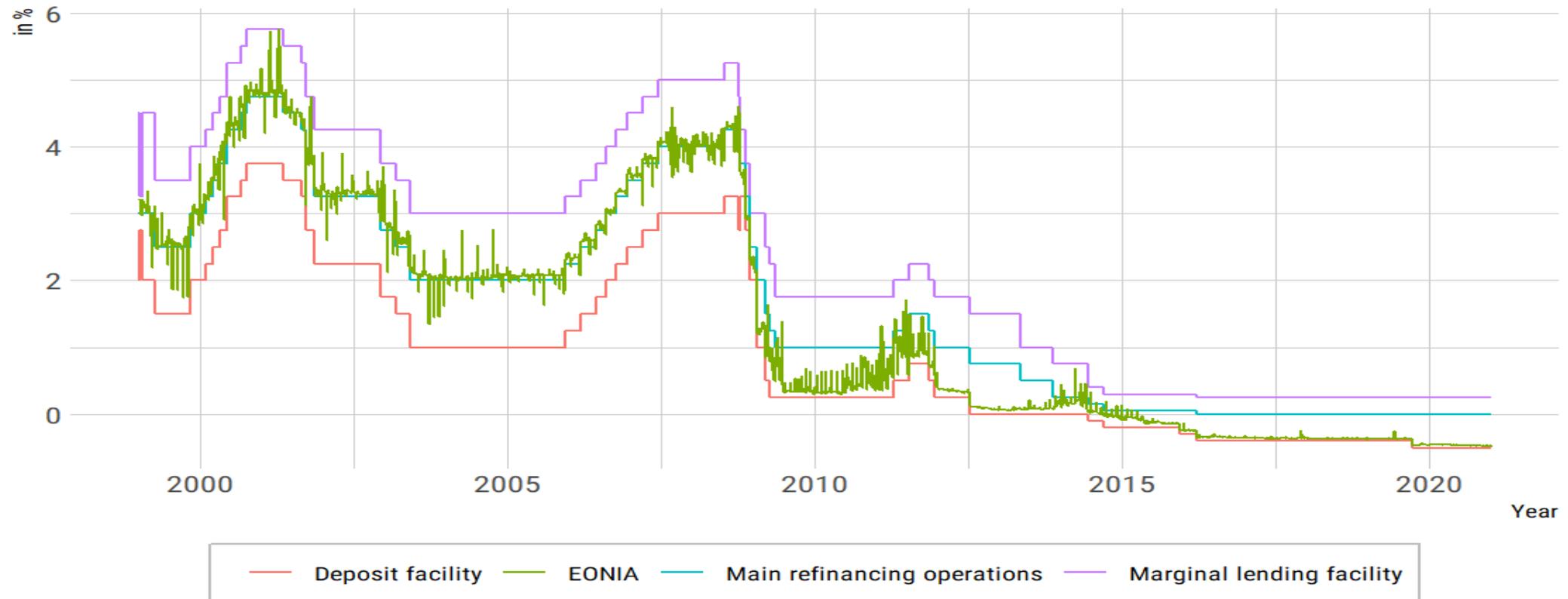
# Structure

- Short history of monetary policy in the European Monetary Union (EMU)
- Lender of last resort for public household
- Unconventional monetary policy
- Monetary policy during covid pandemic
- Negative side effects of super expansionary monetary policy

# Short history of monetary policy in the EMU

- EMU suffered from three major crises
  - Great Financial Crisis and Great Recession 2008 / 2009
  - So called “sovereign debt crisis” in the EMU after 2010
  - Covid-10 pandemic
- When the covid-crisis started the two big crises before were not overcome
- Economic development in the EMU has been unequal and not very dynamic

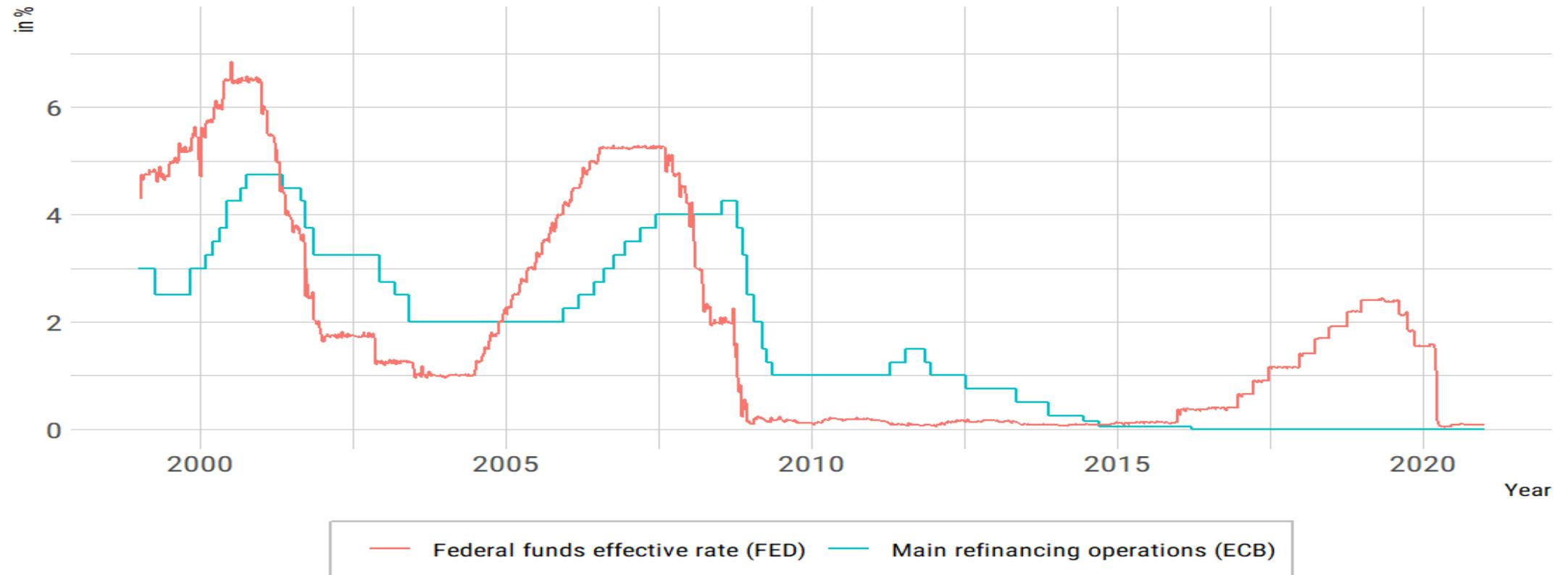
# *Refinancing rate and money market interest rate of the ECB, 1999 – 2021*



Source: ECB (2022)

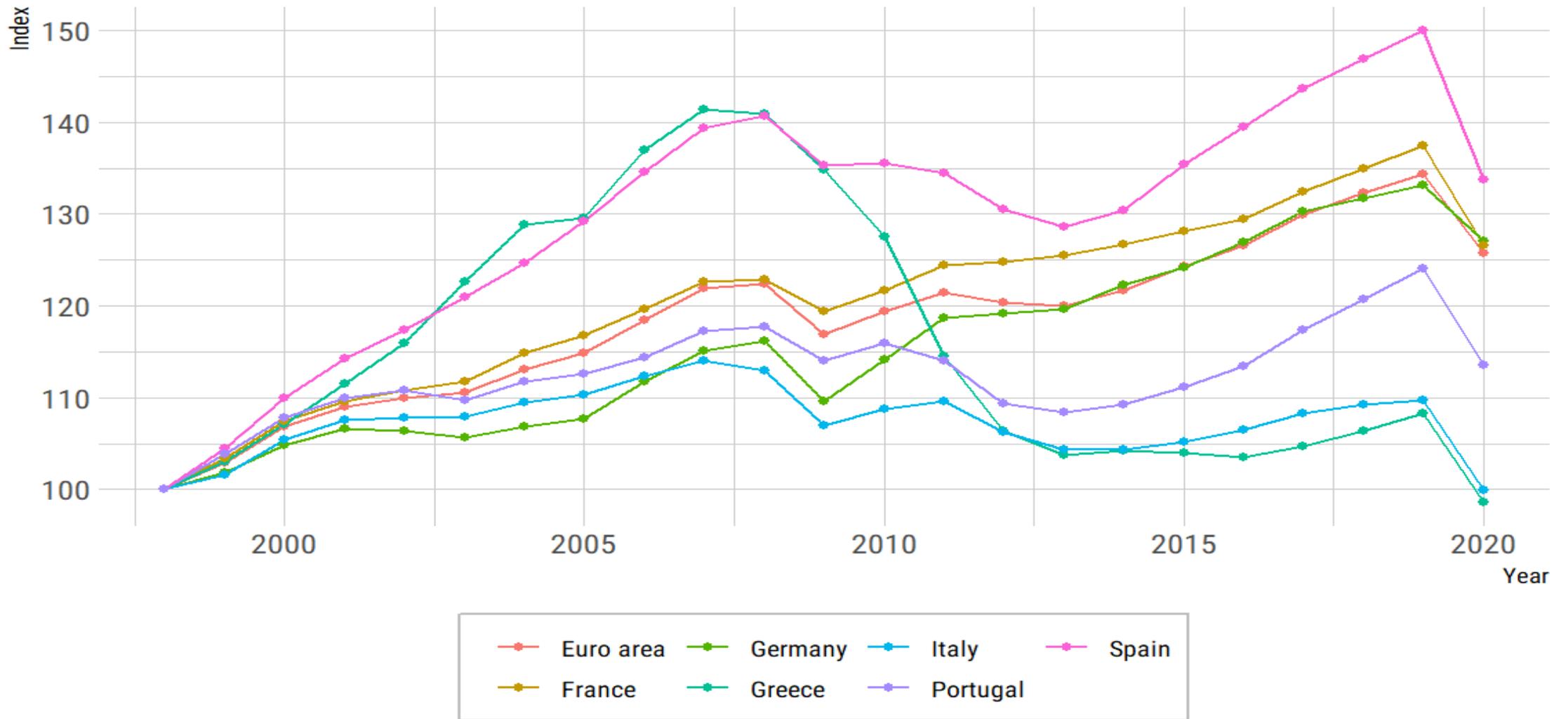
Theoretical foundation of monetary policy: Knut Wicksell: central bank has to follow natural interest rate

# 1999 - 2021



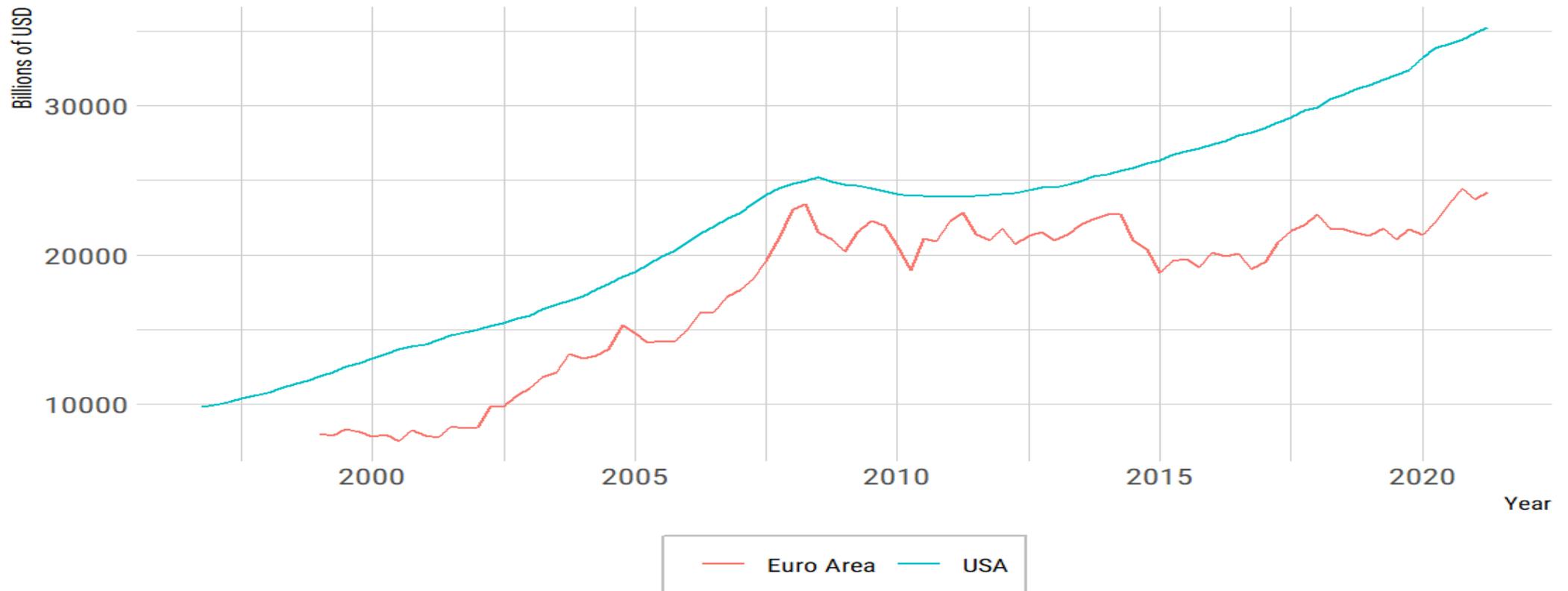
Source: ECB (2022), Board of Governors of the Federal Reserve (2022)

# Real GDP 1999 - 2020 (1999 = 100)



Source: Eurostat (2022)

# Total Credit to Private Non-Financial Sector, Q1 1996 – Q2 2021



Source: Bank for International Settlements (2022)

# Lender of last resort for public households

- After 2010 several governments in the EMU were not able to get credit in financial markets – Greece, Portugal, Ireland, Spain, Cyprus ...
- Mario Draghi 26 July 2012:  
Mario Draghi said “within our mandate, the ECB is ready to do whatever it takes to preserve the euro. And believe me, it will be enough.”
- 6 September 2012: Outright Monetary Transaction  
ECB buys in urgent situations unlimited government bonds of EMU- countries under the condition the country follows the conditionality of the European Stability Mechanism (ESM)
- With Draghi’s speech the so called „sovereign debt crisis“ was over

# Unconventional monetary policy starting 2015

- Zero interest policy was not enough to stabilise the EMU
- Short-term refinancing does not directly control long-term interest rates
- New strategy: Increase every month the volume of central bank money
- The **Asset Purchase Programme (APP)** started March 2015
- The APP was still in place when the pandemic hit the EMU

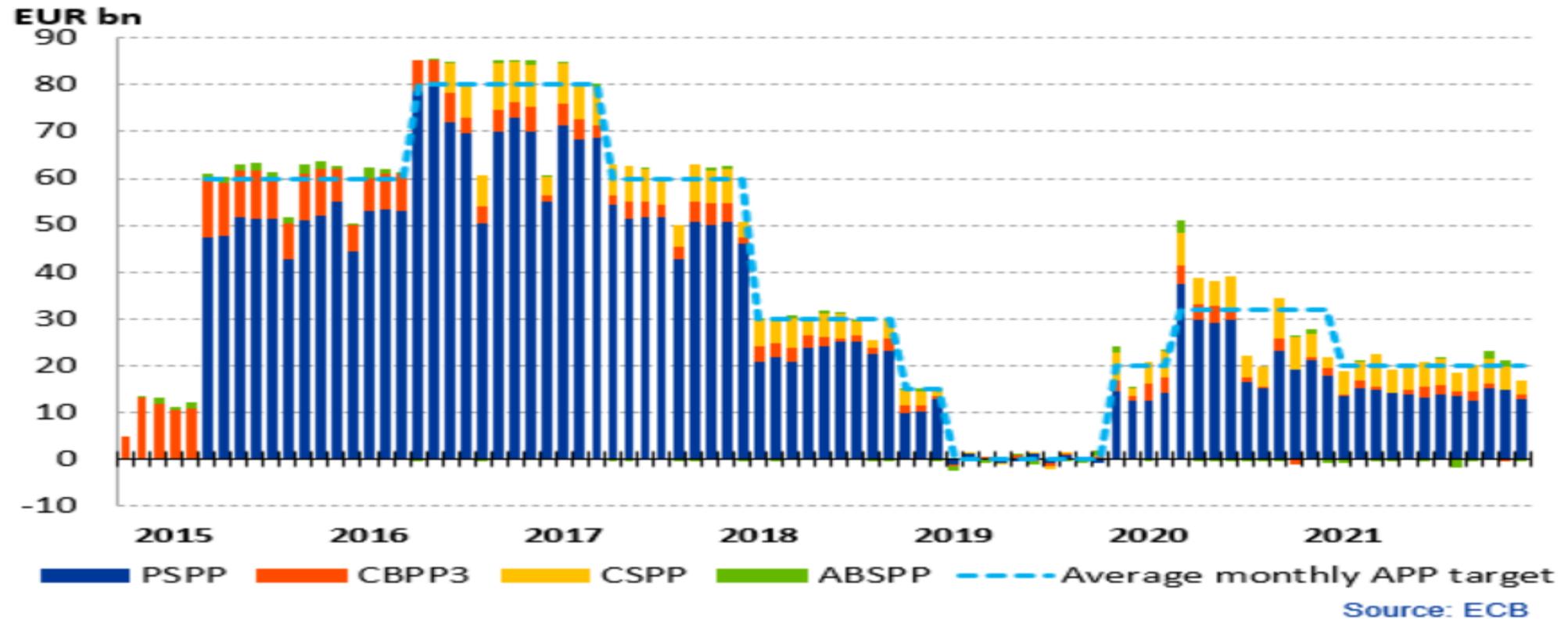
# Asset Purchase Programme (APP)

## **Monthly net purchases by the ECB in euro**

Allocation according to capital quotas of EMU countries on ECB equity

March 2015 -March 2016	60 billion
April 2016 - March 2017	80 billion
April 2017 – December 2017	60 billion
January 2018 – September 2018	30 billion
October 2018 – December 2018	15 billion
January 2019 – October 2019	0
November 2019 – February 2020	20 billion
March 2020 - ongoing	140 billion

# Monthly intervention related to the Asset Purchase Programme (APP)



# Stock of intervention of the APP

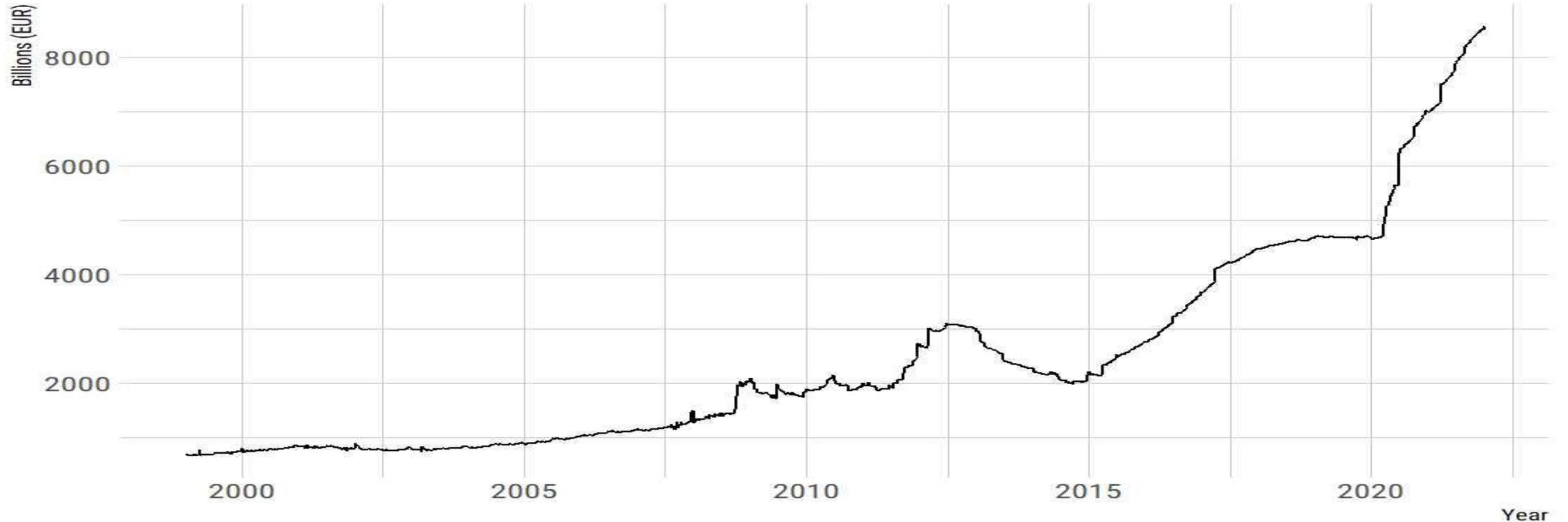
	Holdings in December 2021 (At amortised cost, in EUR billions, at month-end)
ABSPP (Asset-backed securities purchase programme )	<b>28</b>
CBPP3 (Covered Bond Purchase Programme 3)	<b>298</b>
CSPP (Corporate Sector Purchase Programme)	<b>310</b>
PSPP (Public Sector Purchase Programme)	<b>2,487</b>
APP (Asset Purchase Programme)	<b>3,124</b>

Source: <https://www.ecb.europa.eu/mopo/implement/app/html/index.en.html>

# Monetary policy during covid pandemic

- Pandemic Emergency Purchase Programme (PEPP) total 1850 billion euro
- Interventions are not linked to capital quotas of ECB
- Several programmes to stimulate credit expansion by banks to the private sector
- Relaxation of collateral requirements for refinancing of banks

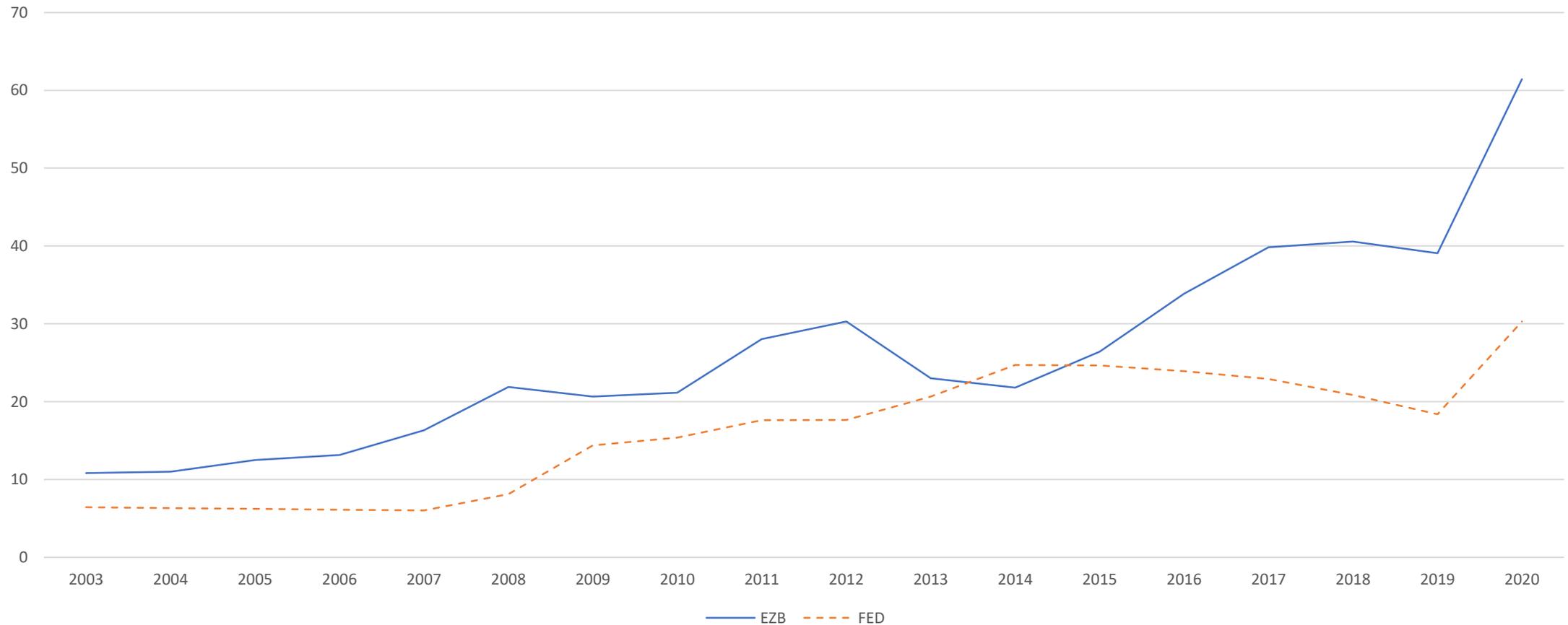
# Balance sheet of the ECB until December 2021



Source: European Central Bank (2022)

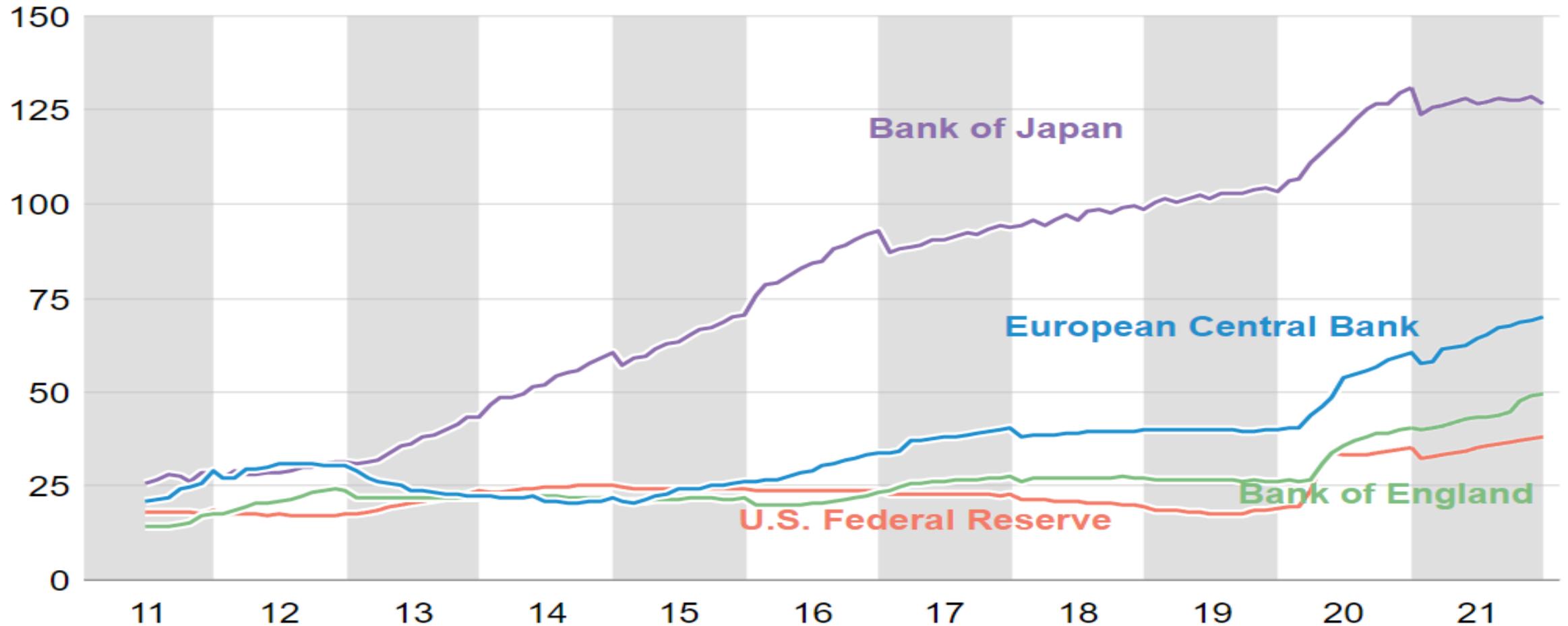
**End 2021: ECB holds more than 40% of public debt in the EMU**

# ECB and FED Balance Sheet as per cent of GDP – 2003-2020



Source: Own calculations; ECB (2021), Eurostat (2021), U.S. Bureau of Economic Analysis (2021), Board of Governors of the Federal Reserve System (US) (2021)

# Central banks balance sheet as per cent of GDP



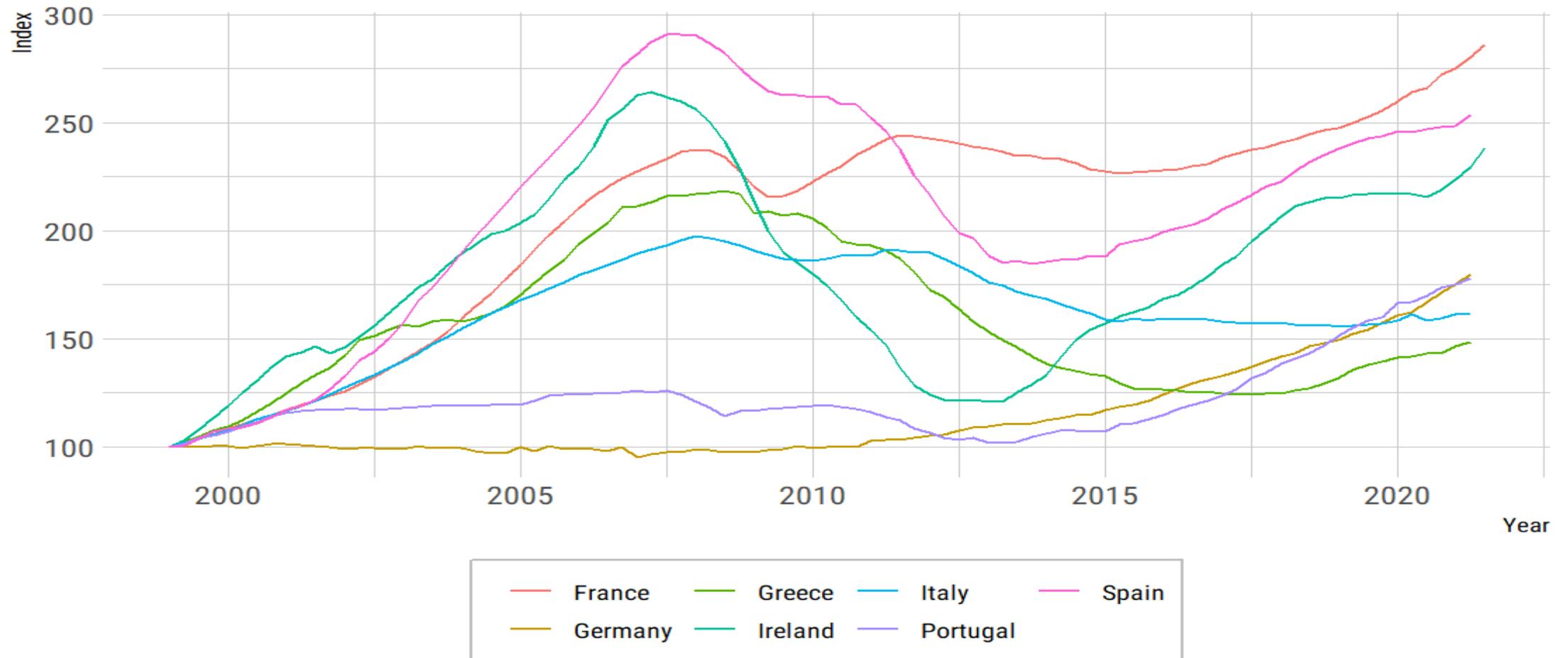
Source: Refinitiv Datastream, central banks, IMF

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# Negative side effects of super expansionary monetary policy

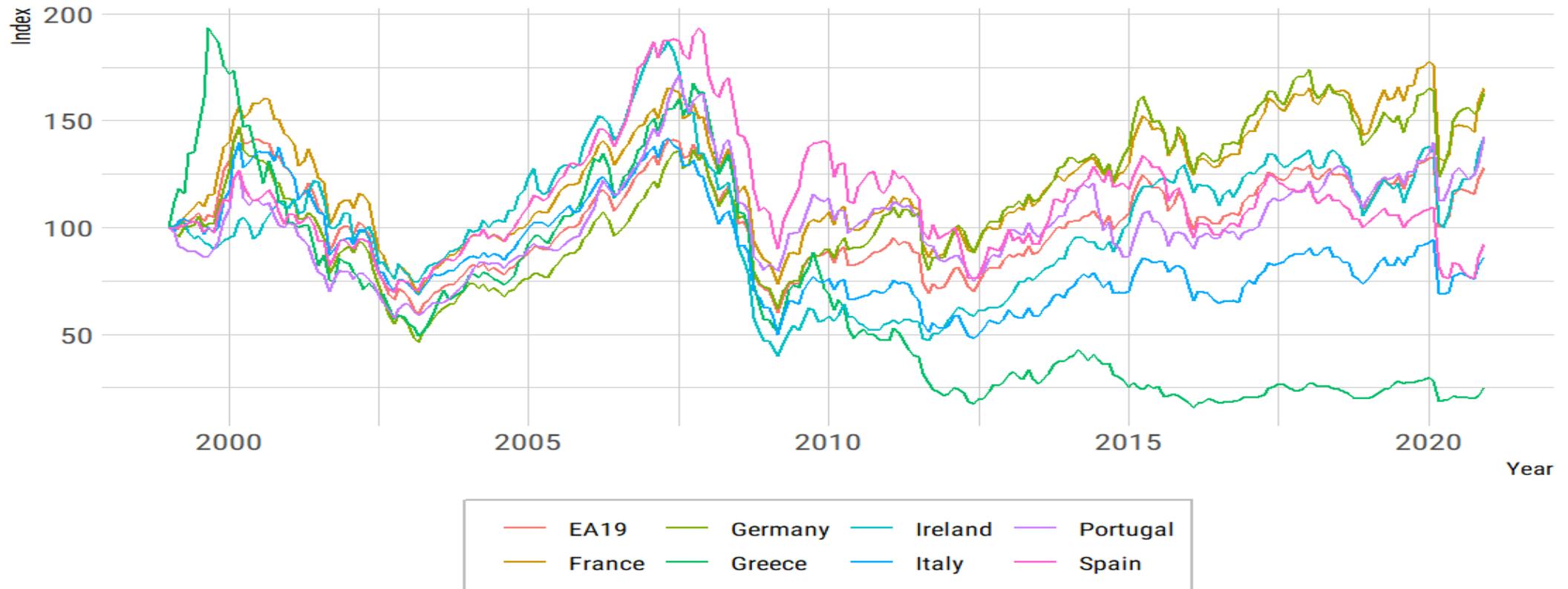
- Zero / negative nominal interest rates – flight in “concrete gold” and shares
- Development of stock market and real estate market bubbles

# Quarterly housing prices 1999 – 2021 (1999 = 100)



Source: OECD (2022)

# Monthly share prices 1999 – 2021 (1999 = 100)



Source: OECD (2022)

# Standard & Poor's 500 Price Earnings Ratio

S&P 500 Price Earnings Ratio

Zoom 10y 30y 50y 80y 100y All

Sep 8, 1979 → Dec 31, 2021



Increasing debt quotas

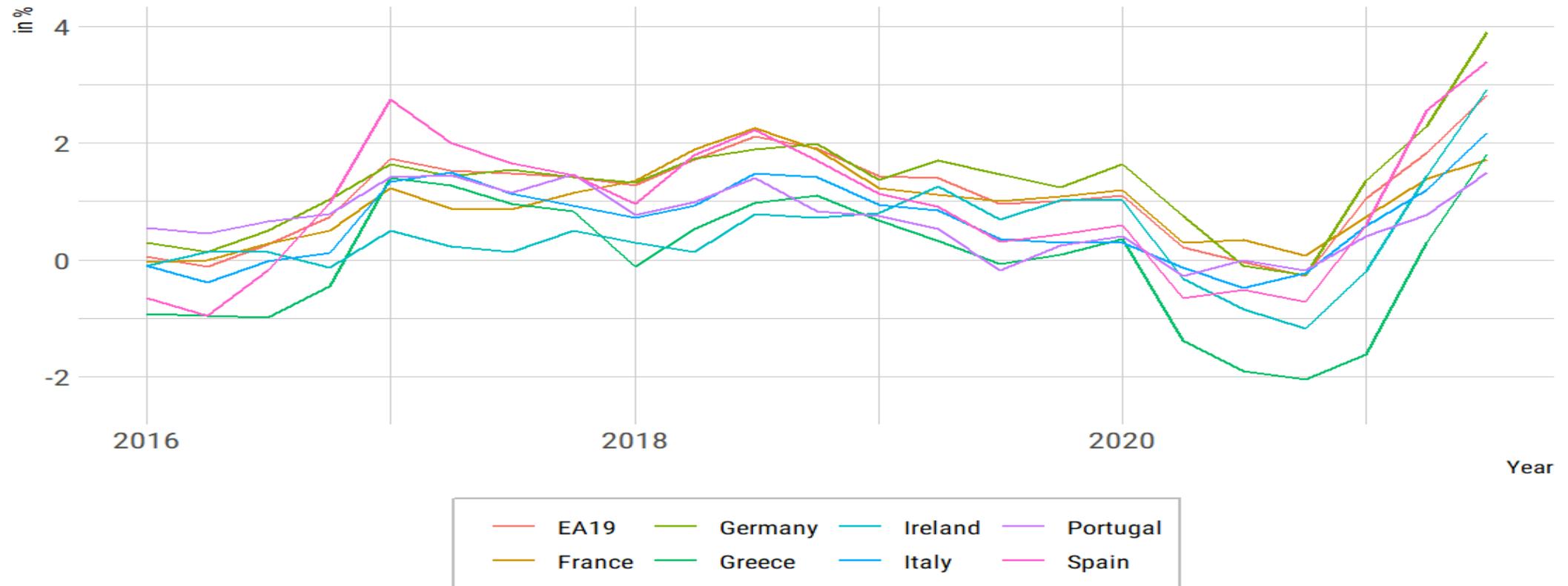
# Private and Public debt in per cent of GDP – Hymen Minsky sends its regards

	1995			2008			2020		
	Private	Public	Total	Private	Public	Total	Private	Public	Total
Germany	154	54	208	175	71	246	177	79	256
France	164	67	231	208	83	291	297	146	443
Italy	123	119	242	170	113	283	180	184	364
Spain	130	68	198	274	48	322	212	148	360
Greece	49	98	147	127	118	245	139	238	377
Portugal	160	76	230	291	85	376	254	157	411
USA	163	94	257	224	102	326	236	161	397

Source: OECD (2021), Trading Economics (2021)

Inflationary pressure danger of increasing  
interest rates

# Consumer price index, annual growth rate in per cent, Q1 2016 – Q3 2021



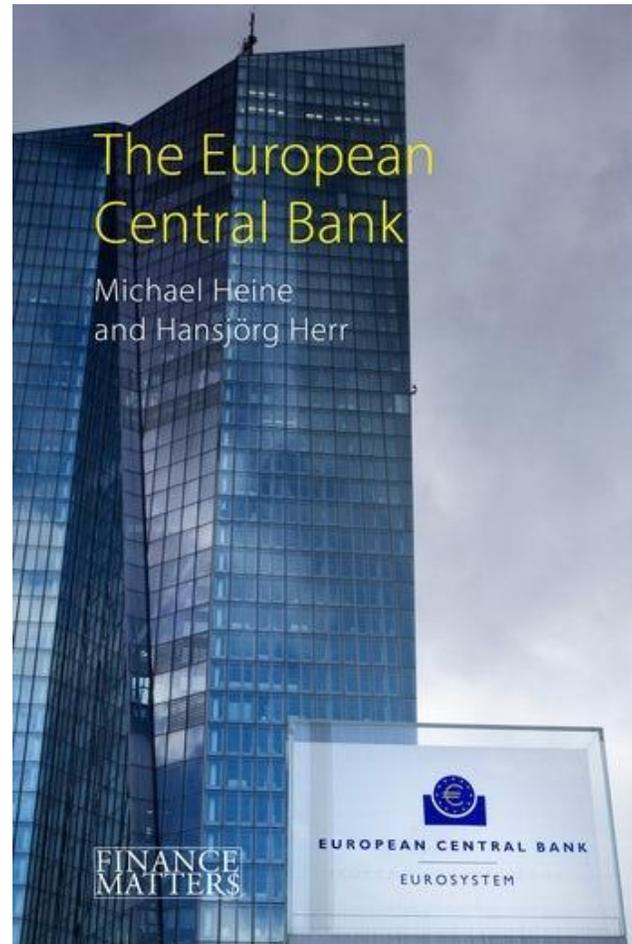
Source: OECD (2022)

Annual inflation rate December 2021 5%, core consumer prices in the Euro Area which exclude energy, food, alcohol & tobacco increased 2.6% year on year in December of 2021

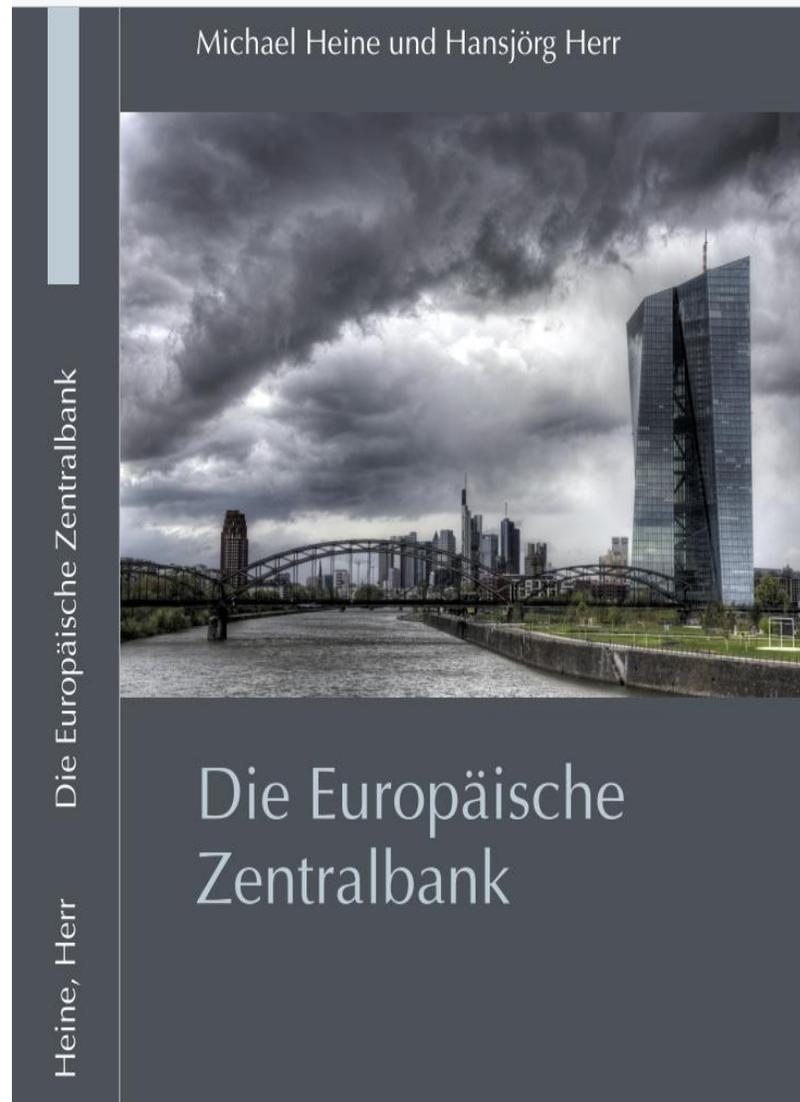
# Summary

- The ECB has been keeping the euro together - driven from one crisis to the other
- The EMU remains fragile as the ECB has no strong partners for macroeconomic management
- Overall debt quotas in many countries and sectors increased
- Zero interest rate and unconventional monetary policy led to asset-price bubbles and disguise of non-performing loans
- Economic development in different countries of the EMU is very different – potential of political conflicts
- Increasing interest rates could lead to asset price deflation and economic crisis – the ECB is in an extremely difficult situation
- The hope is high growth in spite of ecological constraints

2021



2022



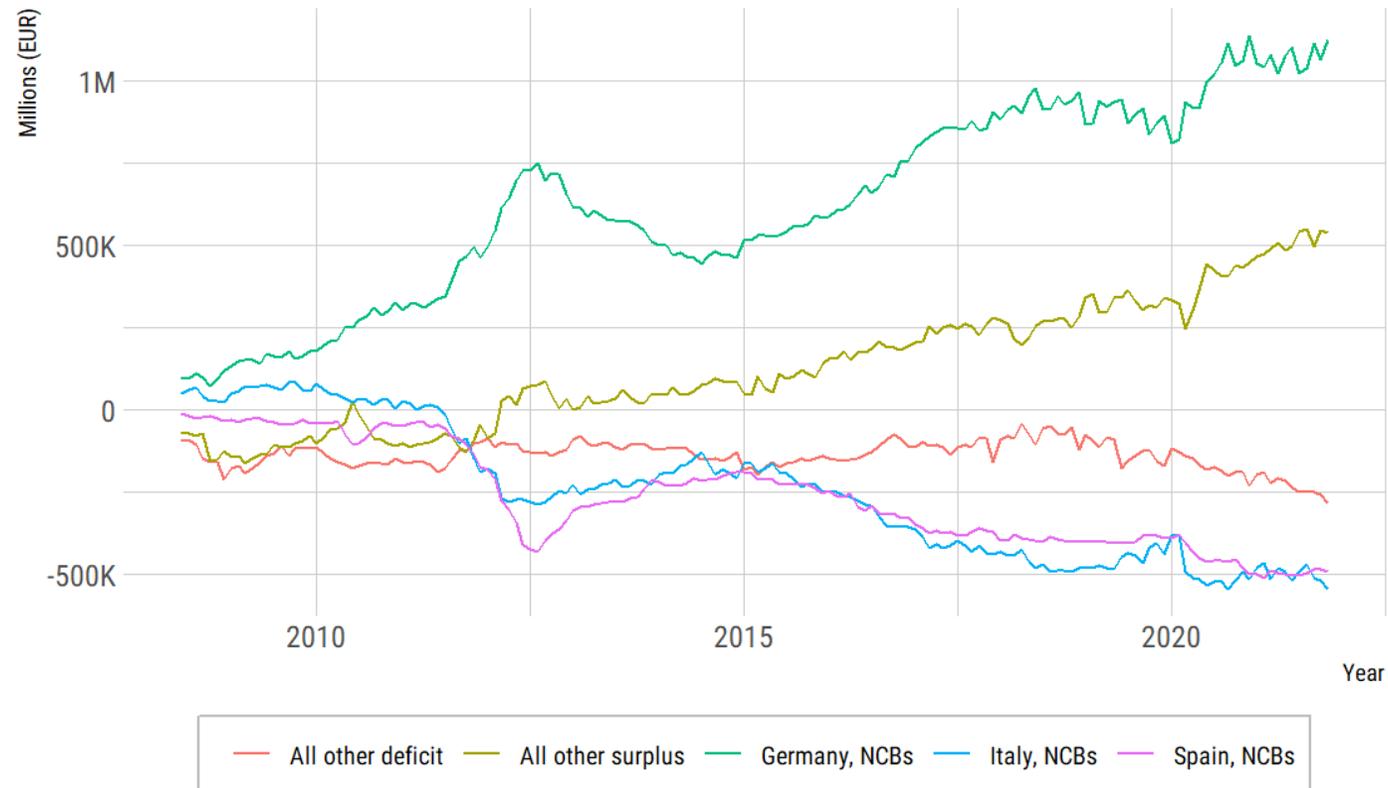
Michael Heine und Hansjörg Herr

Die Europäische Zentralbank

Heine, Herr

Die Europäische  
Zentralbank

# Target2 Saldo 2006-06 – 2021-11



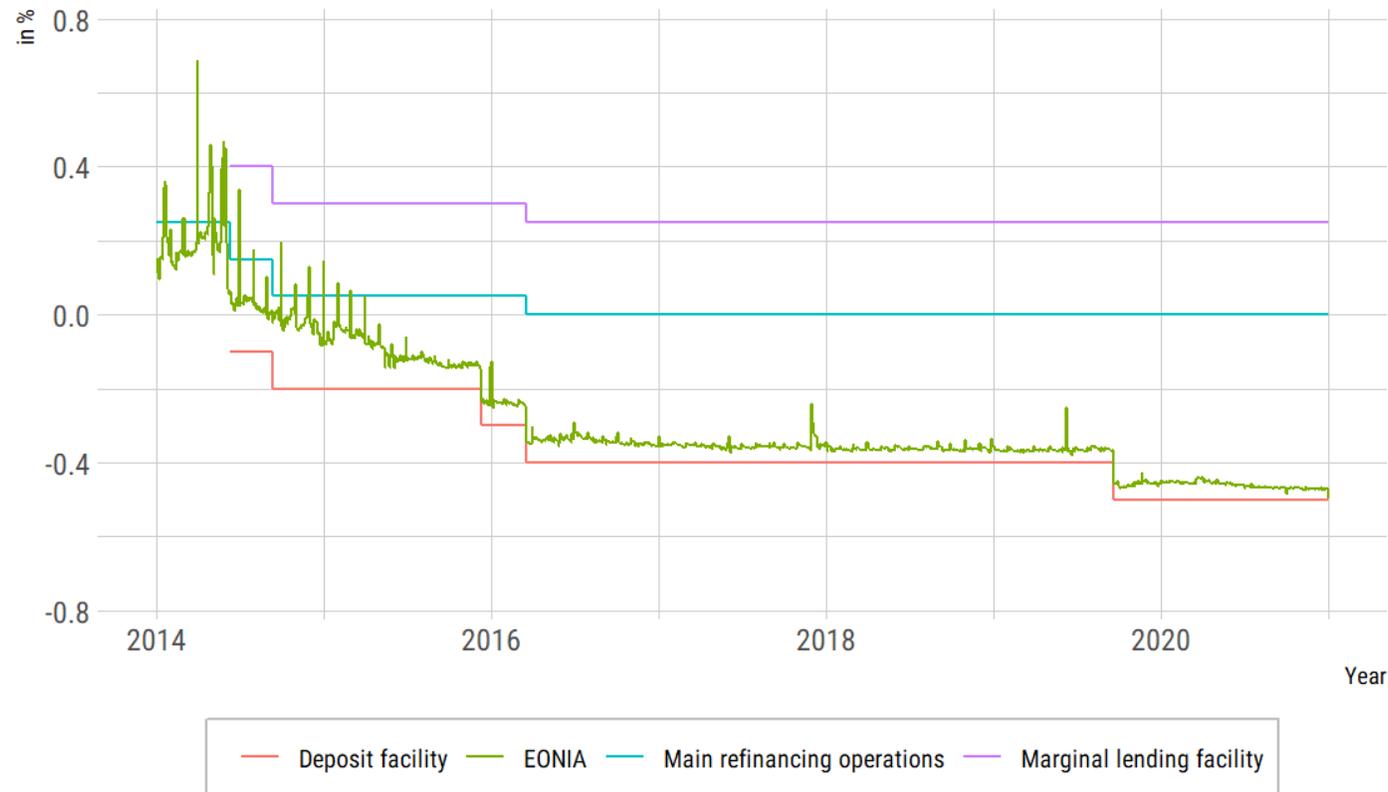
Source: ECB (2022)

All other deficit countries: Austria, Belgium, Greece, Latvia, Netherlands, Portugal

All other surplus countries: Cyprus, Finland, France, Ireland, Lithuania, Luxembourg, Malta, Slovenia, Slovakia

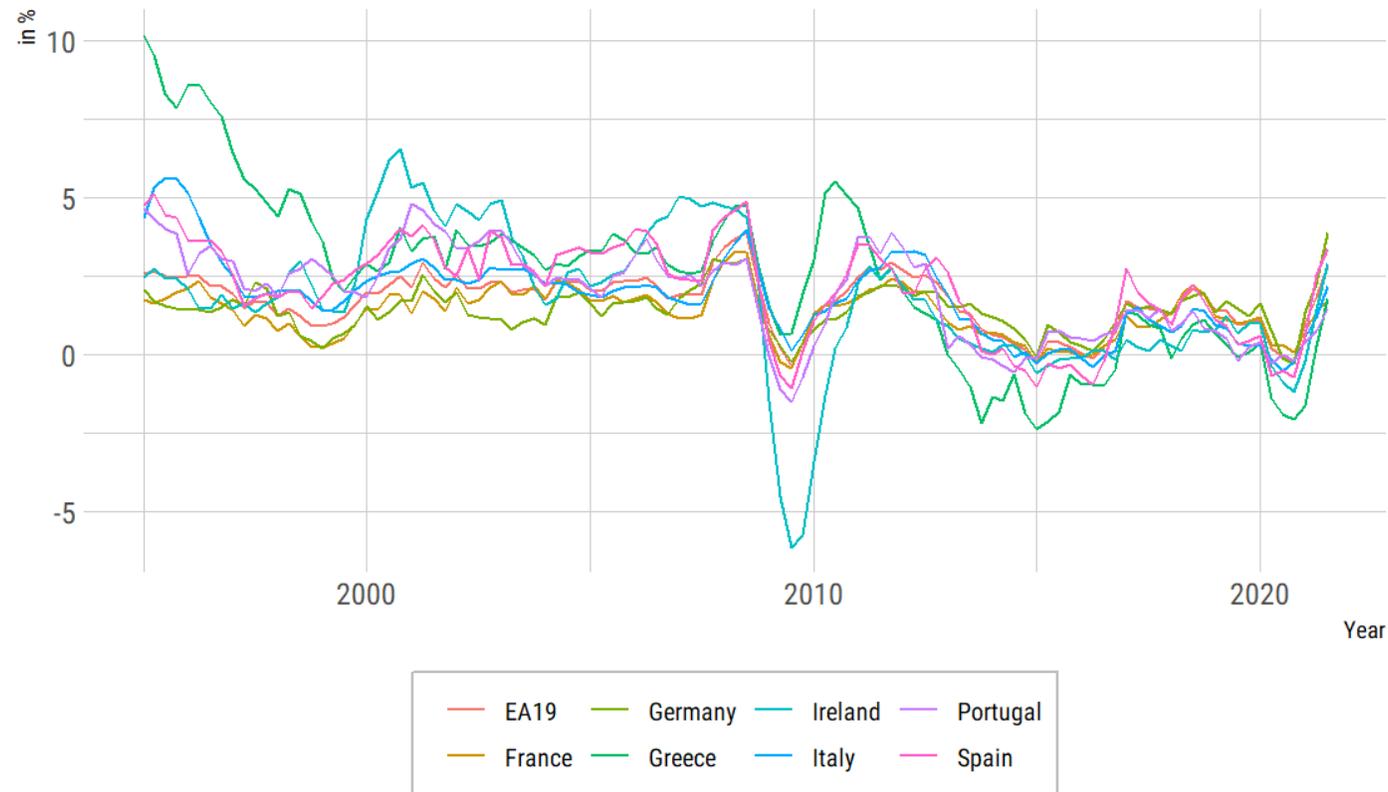
March 2020	April 2020	June 2020	December 2020
<p><b>Expansion of APP (Asset Purchase Programme)</b> Increase by 120 billion euro, in addition to ongoing purchases of 20 billion euro</p>	<p><b>Introduction of PELTROs (Pandemic emergency longer-term refinancing operation)</b></p>	<p><b>Expansion of PEPP</b> Increase by 600 billion euro to a total of 1350 billion euro, Extension until June 2021</p>	<p><b>Expansion of PEPP</b> Increase by 500 billion euro to a total of 1850 billion euro, Extension until March 2022</p>
<p><b>Introduction of PEPP (Pandemic Emergency Purchase Programme)</b> 750 billion euro until December 2020 Purchases include the asset categories, which are also used under the APP</p>	<p><b>Further relaxation of TLTRO III-conditions</b> Lowering of the interest rate by 25 basis points for banks, which reach the growth threshold of credit lending</p>		<p><b>4 additional PELTROs in 2021</b></p>
<p><b>Bridging LTROs (Longer-Term Refinancing Operations)</b></p>	<p><b>Temporary relaxation of collateral requirements</b></p>		<p><b>Relaxation of TLTRO III conditions</b></p>
<p><b>Recalibration of TLTRO III (Targeted Longer-term Refinancing Operations)</b></p>	<p><b>Additional SWAP-Agreements</b></p>		
<p><b>Resumption of the SWAP-Agreement in USD</b></p>			

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Source: ECB (2022)

# CPI, Total, Annual growth rate (%), Q1 1995 – Q3 2021



Source: OECD (2022)