

## Lecture 3 - Non conventional policies: balance sheet policy in the context of the EMU crisis

- As a result of the American financial crisis (in which European banks were involved) between 2007 and 2008, banks in the euro area (and elsewhere) lost confidence in each other and the European interbank market broke down.
- In 2008 the ECB intervened as lender of last resort by making unlimited liquidity available to banks at a fixed rate (fixed rate full allotment). The ECB also increased the longer-term bank refinancing (in the following years the LTROs will reach four years).
- But the eurozone crisis had its own causes, not mere contagion from the US crisis.
- The European crisis was mainly a **balance-of-payments crisis** between core and peripheral countries, such as we had seen in the gold standard and in the countries that fixed exchange rates with the dollar in the 1980s and 1990s.
- Fixed exchange rate regimes make exchange rate risk (apparently) disappear and, if there is freedom of capital movements, favour international lending. In the EMU, moreover, the markets' illusion that all member countries were equally safe (no one would ever be made bankrupt) led to a convergence of long rates at the lowest German levels.
- Core-periphery capital flows generated housing bubbles in the latter, trade deficits and external debt (of banks in Spain, Portugal, and Ireland; also of the government in Greece).
- Once the bubble burst, the banking crisis turned into a sovereign crisis (with states having to recapitalise banks). In 2011, Italy with its high public debt was infected by market panic.

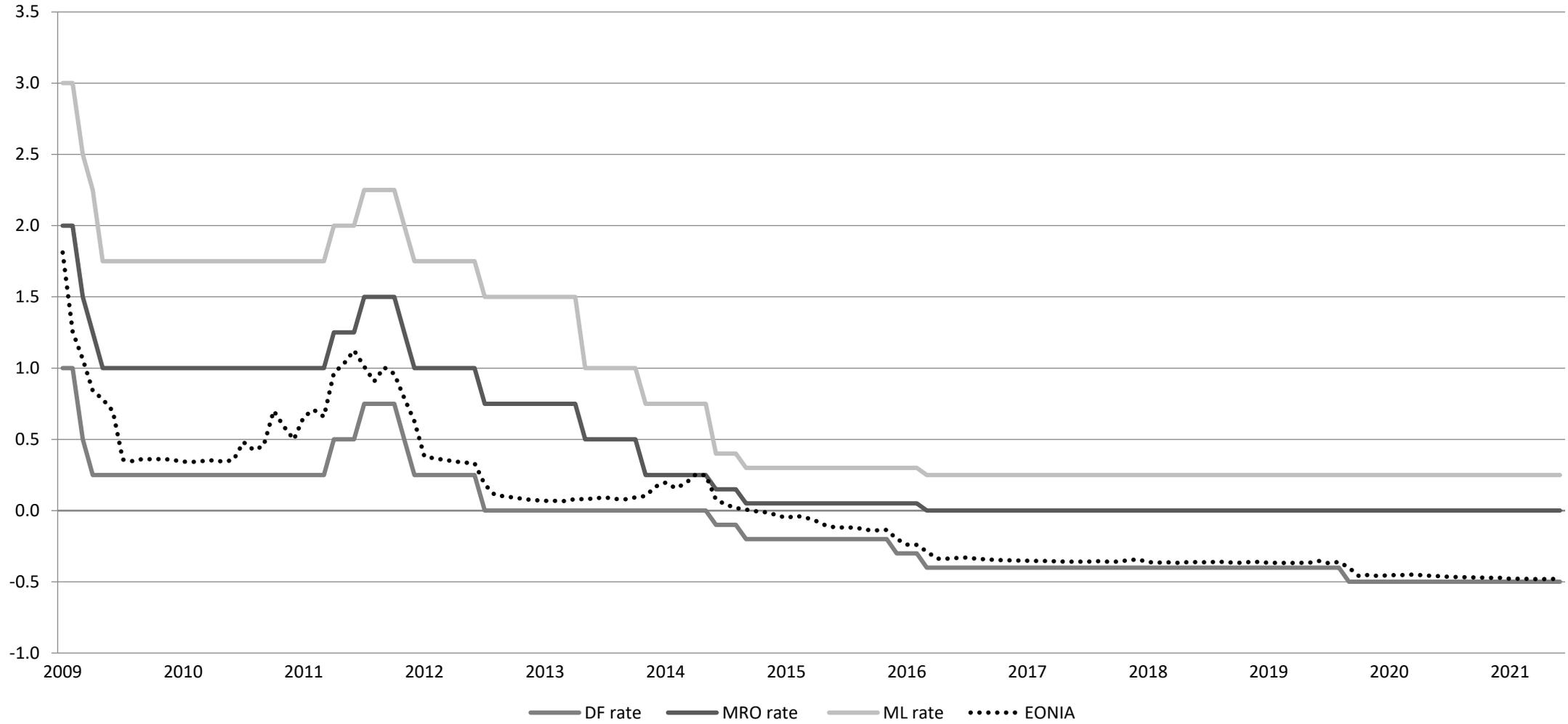
# ECB balance sheet lengthens: from backing banks to backing sovereign debt

- The measures between 2007-8 and 2011-2 were mainly targeted at banks.
- In 2010-11 Greece, Portugal and Ireland declared default.
- By 2011 the sovereign debt crisis also involved Italy and Spain, which risked leaving the euro: the devaluation risk that seemed to have disappeared with the single currency reappeared (as **redenomination risk**).
- The redenomination risk shows itself in the form of a high (and unsustainable) **interest rates spread** between sovereign debt rates and German rates.
- In the summer of 2012, in a famous speech, Draghi promised that the ECB would provide unlimited support to countries at risk of "redenomination" (which would nevertheless have to accept a Memorandum of understanding from the European Commission and the European Stability Mechanism).
- Faced with the spectre of deflation, interest rate policy also became more assertive in 2014 with the adoption of forward guidance, i.e. a commitment by the CB to maintain a certain level of rates until, for example, the desired inflation target is reached.
- The target rate had in the meantime reached the zero lower bound and even negative level.

# Quantitative easing and floor system

- The purpose of forward guidance was to increase the influence of short-term rates on long-term rates.
- At the beginning of 2015 Draghi launched the APP (**Asset Purchasing Programme**), the so-called quantitative easing, with the aim of further easing long-term rates. The programme consisted of the purchase mainly of government bonds.
- But in doing so, the ECB intended both to lower long-term rates (influenced by long-term government bond rates) and to support heavily indebted states such as Italy (although this could not be officially stated). A depreciation of the euro was also an hidden objective.
- Discontinued in December 2019, with the pandemic the APP was resumed with the PEPP (Pandemic emergency purchasing programme) still ongoing.
- With the expansion of bank liquidity and quantitative easing, the ECB transits to the **floor system**, a corridor where in fact the target rate is that on the MDF.
- With the floor system the decoupling between interest rate policy and balance sheet policy is said to become perfect: the central bank can change the money supply without altering the target interest rate.
- In actual fact, QE serves to influence long-term interest rates, and is therefore complementary to interest rate policy. Its purpose is also to open up space for fiscal policy, especially in countries with high debt, and this is probably where its greatest positive effect on growth lies.

# ECB de facto floor system



# Balance sheet in abnormal times

Consolidated balance sheet of the Eurosystem (€ billion) (3 May 2019)

<i>Assets</i>			<i>Liabilities</i>
<b>Autonomous liquidity factors (assets)</b>	947	2258	<b>Autonomous liquidity factors (liabilities)</b>
Net foreign assets (Gold and other foreign assets)	690		1229 Banknotes
Domestic assets	257		203 Government deposits
			826 Other autonomous factors (net)
<b>Monetary policy instruments</b>	3349	2038	Monetary policy instruments
Main refinancing operations (MRO)	6		1404 Current accounts (reserves)
Longer term refinancing operations (LTRO)	719		0 Absorbing operations related to Security Market Programme
Securities held for monetary policy purposes (mainly QE)	2624		
Marginal lending facility	0		634 Deposit facility
<b>Total</b>	4296	4296	



## The ECB strategic revision

- In July 2021, the ECB published a review of its monetary policy strategy. Two elements:
- 1) the inflation target from *below but close to 2%* becomes 2%. This gives equal weight to deflationary and inflationary overshoots.
- 2) The ECB calls for complementarity between fiscal and monetary policy, at least in times of crisis.
- The ECB was often left alone during the long years of the eurozone crisis.

# Implications

- My first aim has been to show you how wrong standard macroeconomic teaching is wrong on money and monetary policy. There are important implications for macroeconomic theory.
- First, the endogeneity of money can be and is shared by even the best mainstream economists and central bankers. What differentiates mainstream and post-Keynesians is not the endogeneity of money (a fact), but the existence of the natural rate of interest (critical importance of capital theory in demolishing this concept).
- Keynes flirted with endogenous money theory, but in the *General Theory* he adopted an endogenous view (transited in textbooks).
- In the famous articles of 1937 he partly retraced his steps by asking who financed investments (since he rejected the Loanable funds theory). He introduced the important concepts of initial and final finance that we have not time to discuss.
- Financing through endogenous money creation (out of thin air) can also be extended from investment to other autonomous components of demand that in the Keynesian multiplier and in the supermultiplier analyses determine, respectively, the degree of utilization of productive capacity and its growth rate.

# Endogenous money and the autonomous non-capacity creating component of AD

- Autonomous consumption financed by consumer credit. Credit (initial finance)  $\rightarrow C_A \rightarrow Y \rightarrow S$  (final finance)
- Saving = dissaving (no net saving)
- Government spending: the State spends before taxing or collecting savings. Modern Money Theory.
- Analysis that merits further study given the formal prohibition of CBs to finance government spending.
- Exports: vendor finance
- International K flows: neoclassical thesis: capital rich countries lend excess saving to capital poor countries (International loanable fund theory).
- In the endogenous money view, domestic or foreign banks in peripheral countries create credit in favour of peripheral countries (initial finance); this leads to CA deficits in the periphery and to CA surpluses in the core, and, ex post, to loans from core countries (final finance)

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# The (in)famous TARGET2: how payments work in the Eurosystem

*(legenda: R reserves; D deposits; all in €)*

				BCE					
				+ 100 T2	+ 100 T2				
		Banca d'Italia		(Bdl)	(Buba)	BUNDESBANK			
			-100 R			+100 T2	+100 R		
			+ 100 T2						
	MPS								Deutsche Bank
-100 R	-100 D							+100 R	+100 D
	(Paolo)								(Katrin)
<i>legenda: R riserve bancarie; D depositi bancari; RU riserve ufficiali, tutto in €</i>									

## Why has T2 caused so much controversy?

- The idea launched by a leading German economist, Hans-Werner Sinn, is that citizens of peripheral EMU countries can buy German goods, or bring their capital to Germany, without transferring anything to Germany (only TARGET2 promises).
- Outside a monetary union, if a country that does not issue an international currency buys foreign goods, or exports capital, it loses foreign exchange reserves (say, dollars).
- Let's see. Suppose that a Greek citizen buys a German product (a fridge Bosch) financed out of credit creation by a Greek bank (or by a Greek branch of a German bank)

Betabank	
+1000	+1000
(loan to Athanasios)	(deposit Athanasios)



# Athanasios spends.

				BCE					
				+1000 T2	+1000 T2				
		Bank of Greece (BoG)			(Buba)	Bundesbank			
			-1000 R			+1000 T2	+1000 R		
			+1000 T2						
Betabank								Deutsche Bank	
-1000 R	-1000 D							+1000 R	+1000 D
	(Athanasios)								(Bosch)

## In normal times DB lends its excess reserves to Betabank

Incidentally, this is a manifestation of Germany lending savings to Greece: note that the process has begun from endogenous money creation  $\rightarrow$  imports  $\uparrow$   $\rightarrow$  German income  $\uparrow$   $\rightarrow$  German savings  $\uparrow$ ; in traditional economics German excess savings are lent to Greece and Greek imports  $\uparrow$ ; but German excess savings are due to a trade surplus  $S - I = X - M$  (vicious circle of this view excess savings results from a trade surplus, but a trade surplus results from excess savings lent to Greece)  
 In general: the economic circuit in a market economy starts from money creation!

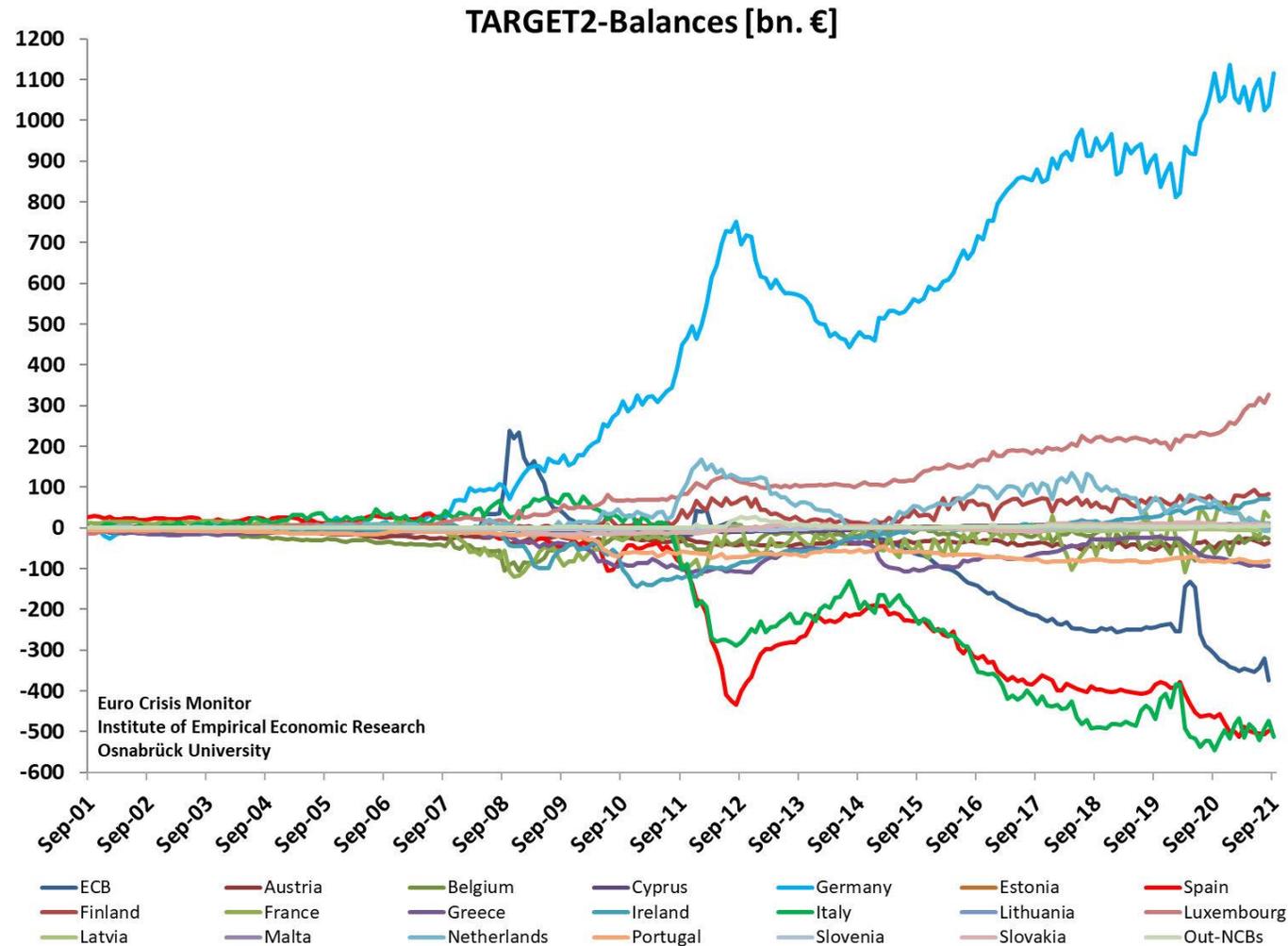
		BCE					
		+1000 T2		+1000 T2			
		Bank of Greece		Bundesbank			
		+1000 T2	10 T2	10 T2	+1000 T2	+1000 R	
		(BoG)	(Buba)				
		10 T2 (residual)			10 T2	10 R	
		+990 R			(residual)	(residual)	
Betabank (BB)							Deutsche Bank
+990 R	+990						10 R (residual)
	(loan						+990
	from DB)						(loan to BB)
							+1000 D
							(Bosch)

## Who paid for the fridge? (a dialogue from my book)

- It is tempting to say that, for all intents and purposes, Buba - which created euros for Bosch - paid for that fridge by receiving a TARGET2 claim against which the Bank of Greece has a corresponding TARGET2 liability.
- So the economic substance is that Germany's positive TARGET2 balances correspond to a loan from that country to its deficit partners, having made a payment for them for a German product.
- *So you are saying that if the Bundesbank had wanted to, it could have given 1000 euros to Bosch without selling a fridge to Greece. Of course! It's as if the Buba had financed a donation of a fridge to Greece.*
- *But Athanasios paid for the fridge. Yes, our Greek friend has no responsibility. But theoretically **if the Bank of Greece reneged on its TARGET2 debt** and wrote off 1000 Euros from its liabilities, it could return 1000 Euros to Athanasios, as shown in the next table.*

Bank of Greece			
	-1000		Betabank
	(T2 liability)		
	+1000	+1000	+1000
	(reserves)	(reserves)	(deposit of Athanasios)

De facto, the CA deficit of the European periphery were financed not via T2 but by core banks. We had, however, two episodes in which T2 imbalances exploded, as shown in the figure



## First episode (2011-2012): the ECB finances the sudden capital flow stop

- After the PIGs defaulted, the panic spread to Italian and Spanish public debts with a capital flight from peripheral to core countries.
- In a system of fixed exchange rates this would have led to the exit of these countries from the system and to a default with IMF intervention.
- In this case, the ECB launched a EUR 1100 billion loan to the banks, with which the banks replaced the core investors as lender to the respective governments.
- Core investors repatriated capital, leading to T2 imbalances.
- For peripheral governments, external debt to private individuals was replaced by official T2 debt (and if the country leaves the euro, bye-bye debt).
- It is as if a country, instead of paying back a dollar-denominated debt, could issue a currency (or an IOU) called "T2-dollars" which the creditor is obliged to accept. A currency/IOU which has no maturity, but which is not usable towards third-party payments.

## Second episode: the Bundesbank buys Italian government bonds

- The second episode has to do with the QE that started in 2015.
- The Bank of Italy often bought Italian securities in Frankfurt (QE is decentralised, each member bank of the Eurosystem buys national securities).
- Many international funds operate in Frankfurt.
- Simplifying, in fact the Bundesbank can operate there, however, and the euros for the purchase of Italian bonds are issued by it in exchange for... T2 claims!
- The Bank of Italy obtains the Italian bonds by paying... T2 liabilities.
- All these stories are narrated in *Heterodox Challenges* (Springer 2020)

That's all folks!

# References

- ...and of course:



- Many thanks for your attention!
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