LIETUVOS BANKAS
EUROSISTEMA

Mission (im)possible: connecting bank credit, money creation and economic imbalances

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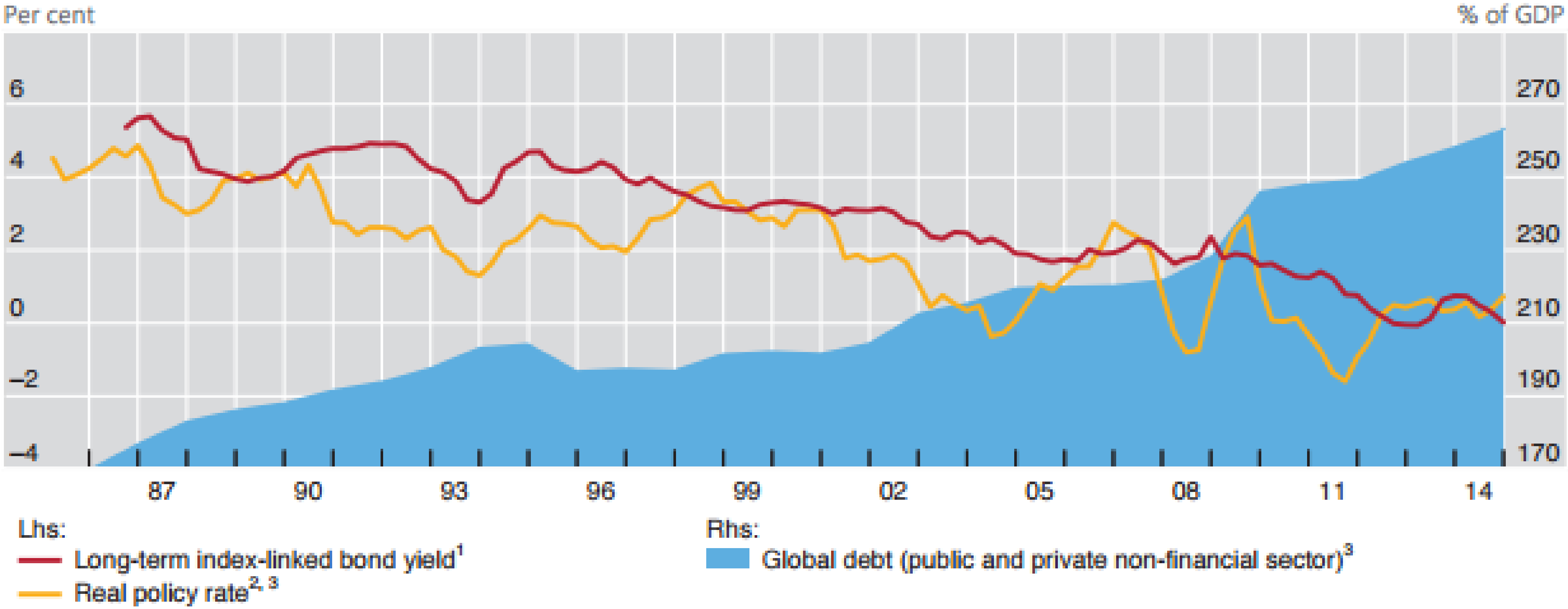
Reassessing the role of credit (1)



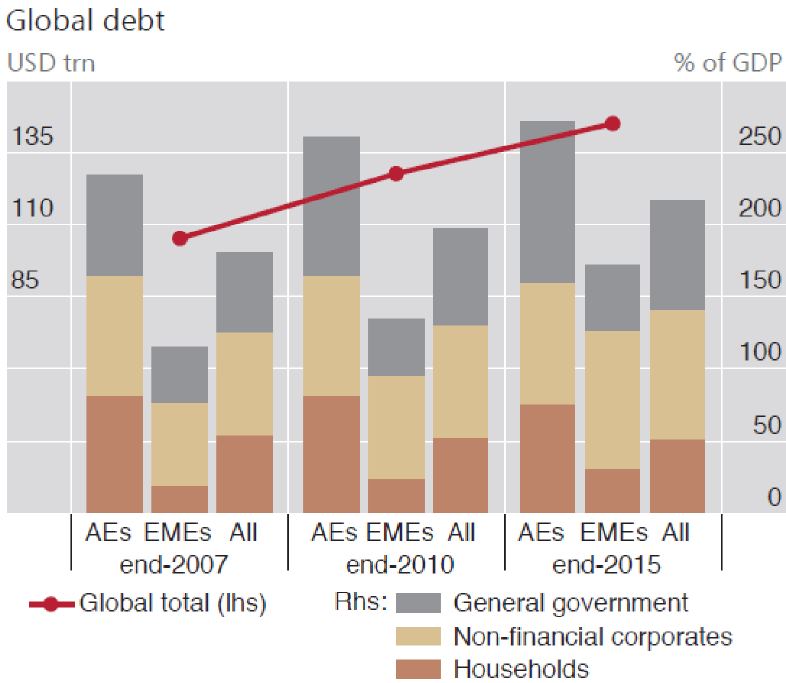
Source: BIS (2016).

Reassessing the role of credit (2)

- **Traditional „intermediation of loanable funds“ view**: credit is just temporary reallocation of resources between savers and borrowers

- ***Financing through money creation view:*** „the key function of banks is the provision of *financing*, or the creation of new monetary purchasing power through loans“ (Jakab and Kumhof, 2015).

- „Debt has been acting as a political and social substitute for income growth for far too long“ (BIS, 2016)

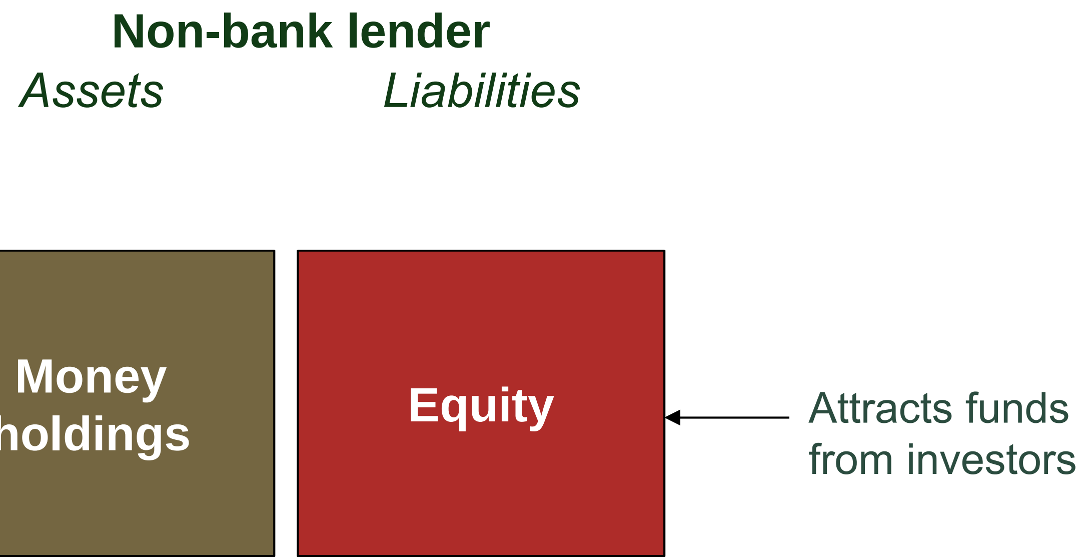


Source: BIS (2016).

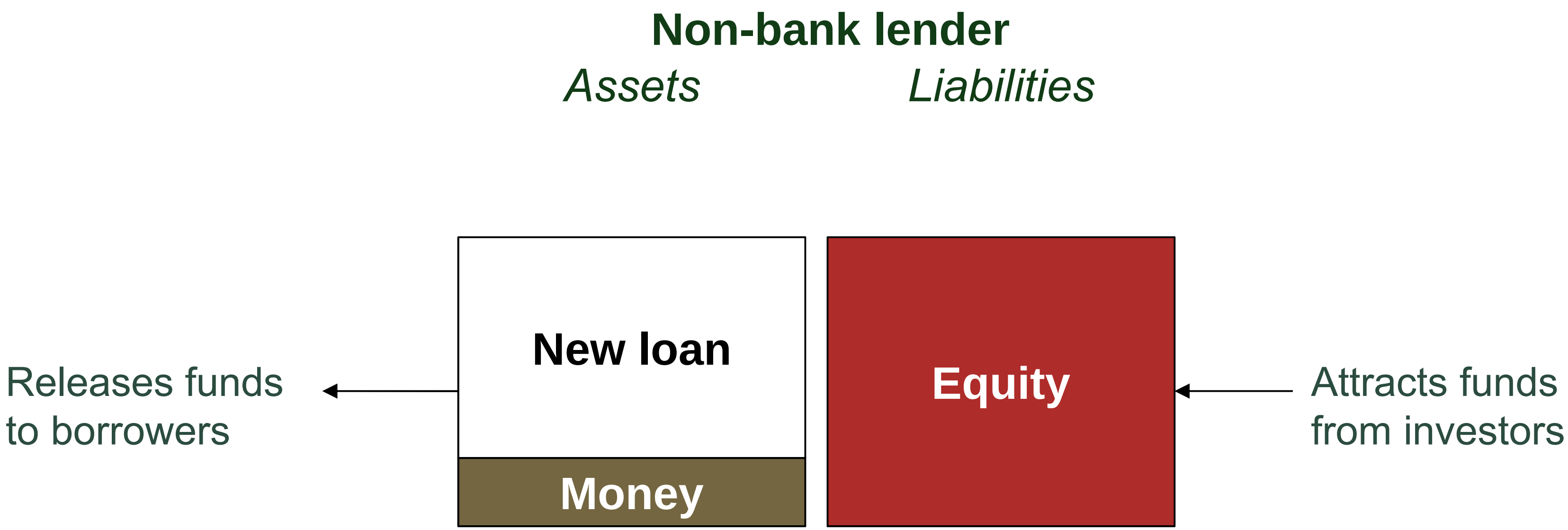
If FMC holds, economic implications are immense

- Bank credit is not predicated on savings
- Bank credit creates money (deposits) and purchasing power
- Bank credit directly adds to aggregate demand
- This is in stark contrast with traditional view of banks as financial intermediaries (saving → deposits → credit)
- Traditional view is still embraced in almost all mainstream models, including state-of-the-art DSGE models used for monetary and macroprudential policy analysis

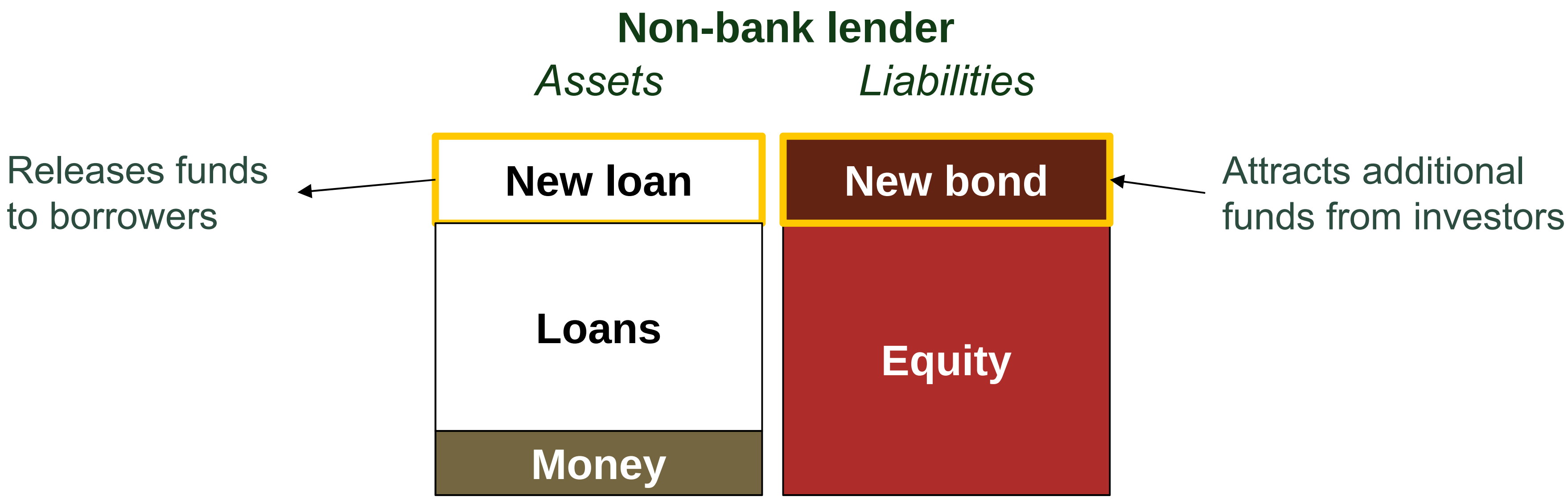
Non-bank lenders attract funds to lend them out



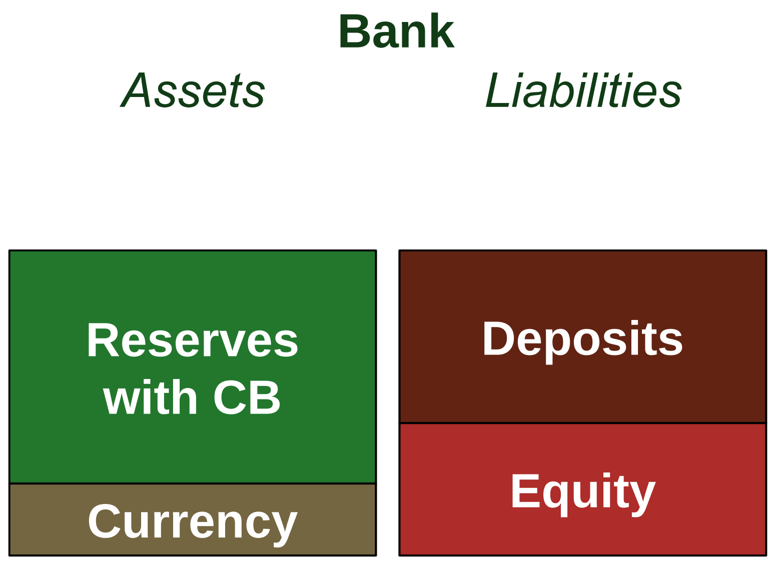
Non-bank lenders attract funds to lend them out



Non-bank lenders attract funds to lend them out

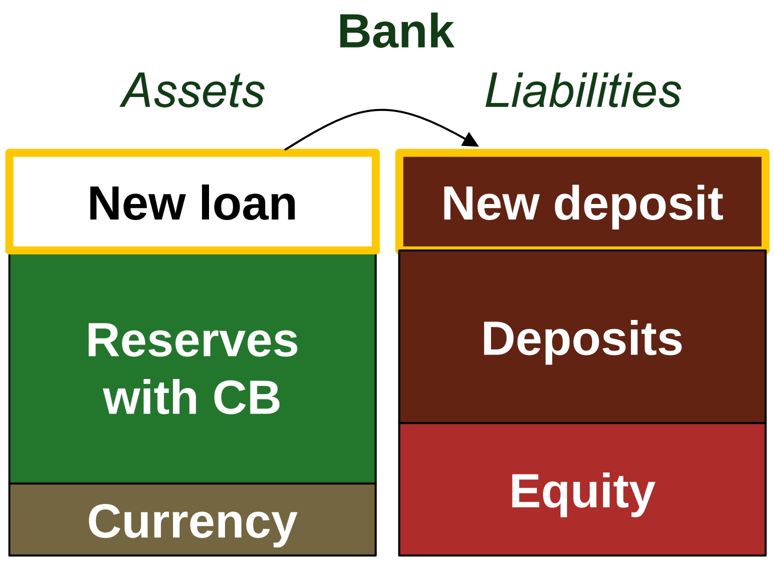


Banks are special: credit creates deposits (money)



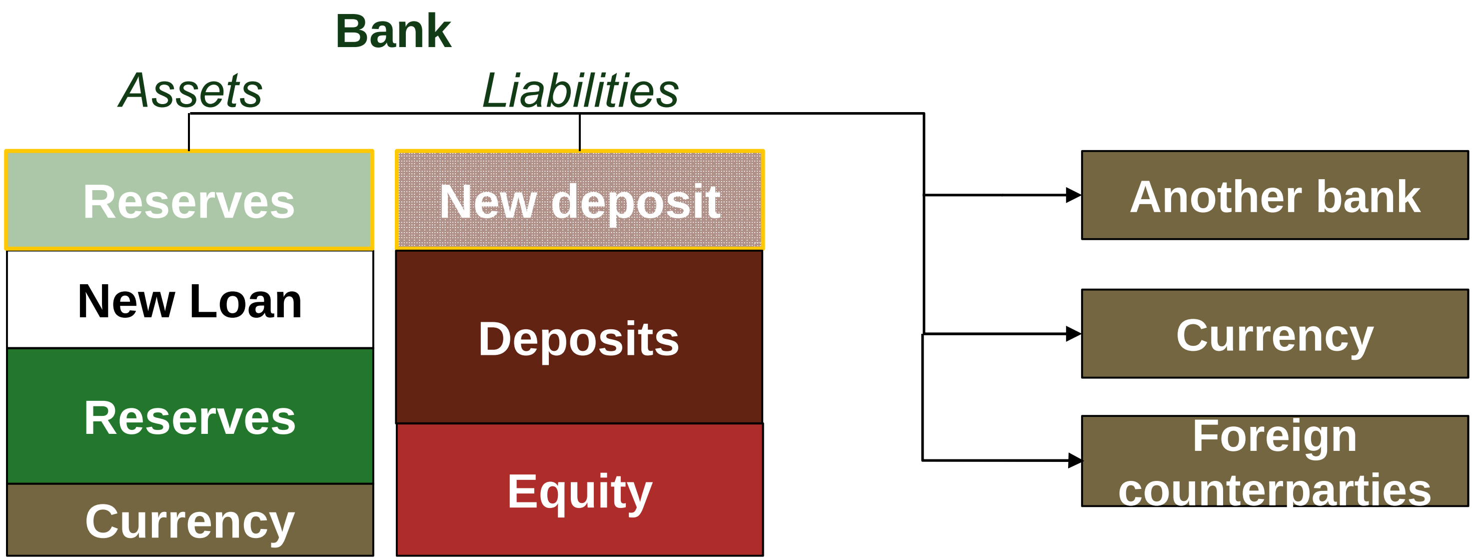
Source: adapted from McLeay, Radia and Thomas (2014).

Banks are special: credit creates deposits (money)

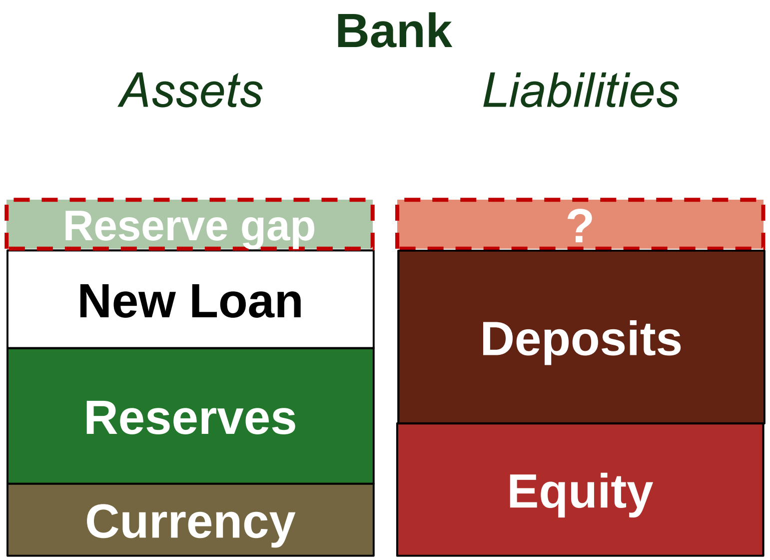


No external funding required (at least initially)

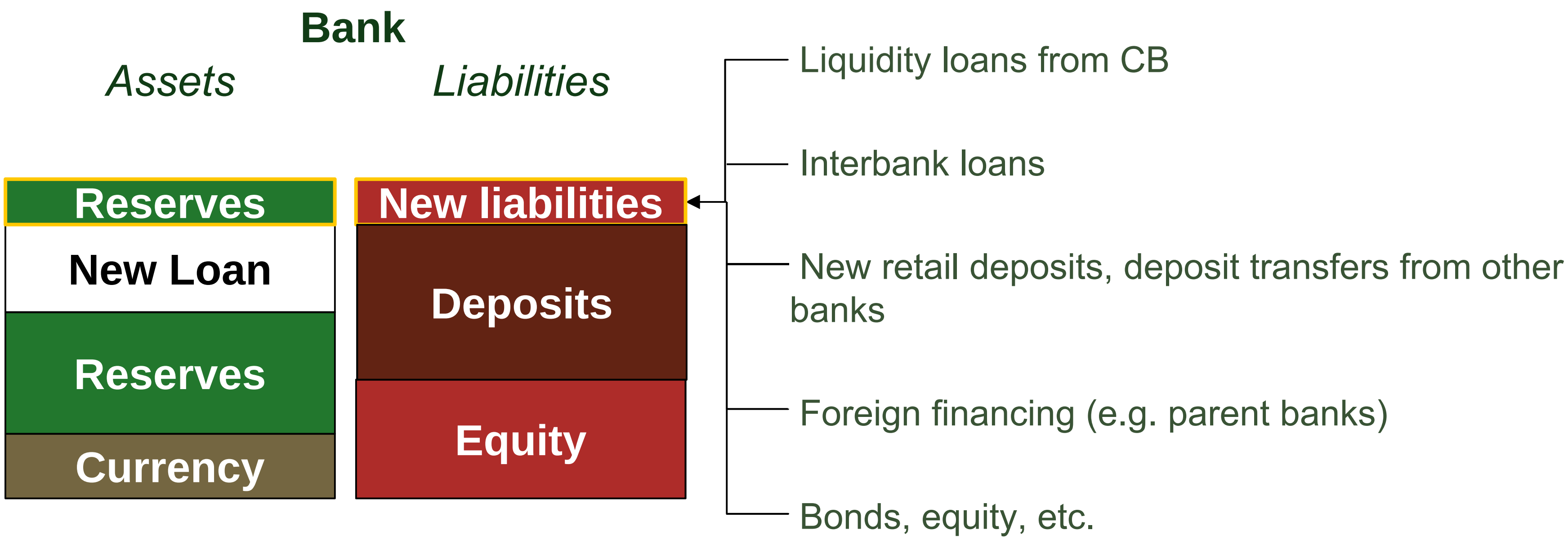
Credit is self-financing, unless deposits are redeemed



In that case there is need for external financing to ensure sufficient liquidity



But CBs usually provide liquidity on demand



Credit in the context of “equation of exchange”

Non-bank lenders may contribute to rising **velocity of money**

$$M \times V = \underbrace{P \times Q}_{\text{Nominal GDP}}$$

Bank credit increases **money stock** and acts a strong stimulus on nominal GDP

Integrated accounts (IA) analysis – a way forward?

Transactions \ Sectors	Domestic economy						Rest of the world
					Financial sector		
	Aggregate economy	Government sector (g)	Households and NPISH (h)	Nonfinancial corporations (c)	Monetary financial institutions (m)	Other financial corporations (o)	
Gross national disposable income							
Consumption							
Investment							
Net exports							
Primary and secondary income balance							
Capital account							
Statistical errors and omissions							
Net lending (financial account balance)							
Net financing							
Foreign financing							
Domestic financing							
Nonmonetary financing							
Monetary financing							
Domestic credit							
Broad money							

Economic accounts record economic transactions among sectors

Financial accounts record corresponding financial transactions

Source: adapted from IMF (2013) and Ramanauskas, Matkėnaitė and Rutkauskas (2016a,b).

Example 1. Savings-led spending – no immediate impact on aggregate demand and activity

Trans… / Sectors	Domestic economy				Financial sector	
	Aggregate economy	Government sector (g)	Households and NPISH (h)	Nonfinancial corporations (c)	Monetary financial institutions (m)	Other financial corporations (o)
Gros	0			-100+100		
Consumption			100			
Investment		-100				
Net exports						
Primary and secondary income ba						
Capital account						
Statistical errors and omissions						
Net lending (financial account balance)		**-100**	**100**			
Net financing		**100**	**-100**			
Foreign financing						
Domestic financing						
Nonmonetary financing		100	-100			
Monetary financing						
Domestic credit						
Broad money						

… no immediate change in aggregate nominal income

Households reduce spending…

… so government can increase investment

… and acquire government bonds

Note on sign convention: rise in income “+”, rise in spending “-”, rise in net financial liabilities “+”.

Example 2. Bank credit -led spending – immediate impact on aggregate demand and activity

Sectors / Transact	Domestic economy				Financial sector	
	Aggregate economy	Government sector (g)	Households and NPISH (h)	Nonfinancial corporations (c)	Monetary financial institutions (m)	Other financial corporations (o)
Gross national disposable income	100			100		
Consumption						
Investment	-100		-100			
Net exports						
Primary and secondary income balance						
Capital account						
Statistical errors and omissions						
Net lending (financial account balance)	**0**		**-100**	**100**	**0**	
Net financing	**0**		**100**	**-100**	**0**	
Foreign financing						
Domestic financing						
Nonmonetary financing						
Monetary financing						
Domestic credit			100		-100	
Broad money				-100	100	

… immediate increase in aggregate nominal income

… households acquire new housing from firms

Banks extend credit to households and initially household deposits rise…

… thus, banks' balance sheets expand but remain balanced

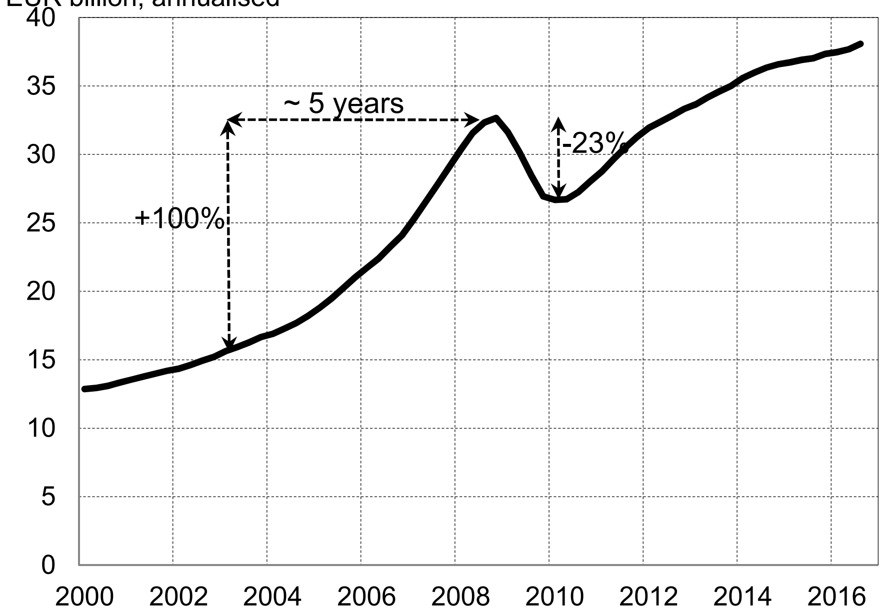
… corporate deposits rise as a result (corporates look like "savers")

Note on sign convention: rise in income "+", rise in spending "-", rise in net financial liabilities "+".

We have experienced a remarkable boom-and-bust economic cycle supercharged by credit

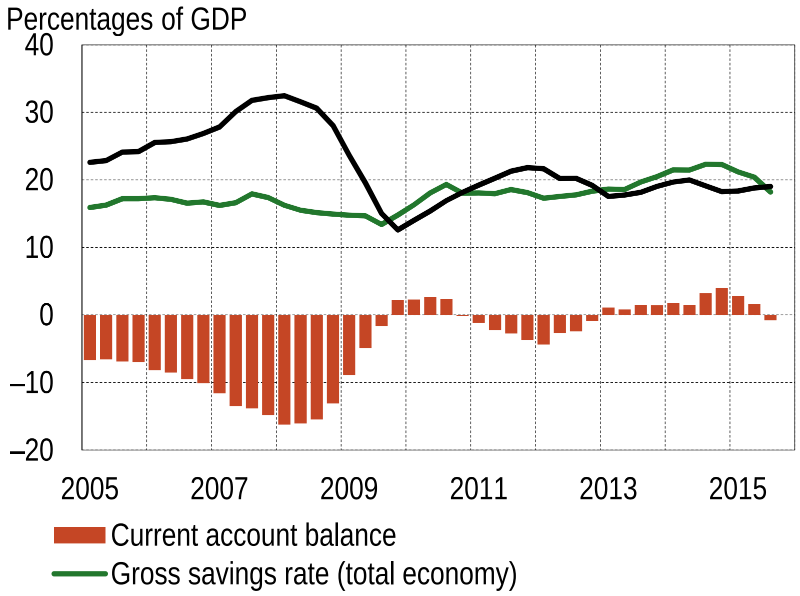
Dynamics of nominal GDP in Lithuania

EUR billion, annualised



Source: Statistics Lithuania.

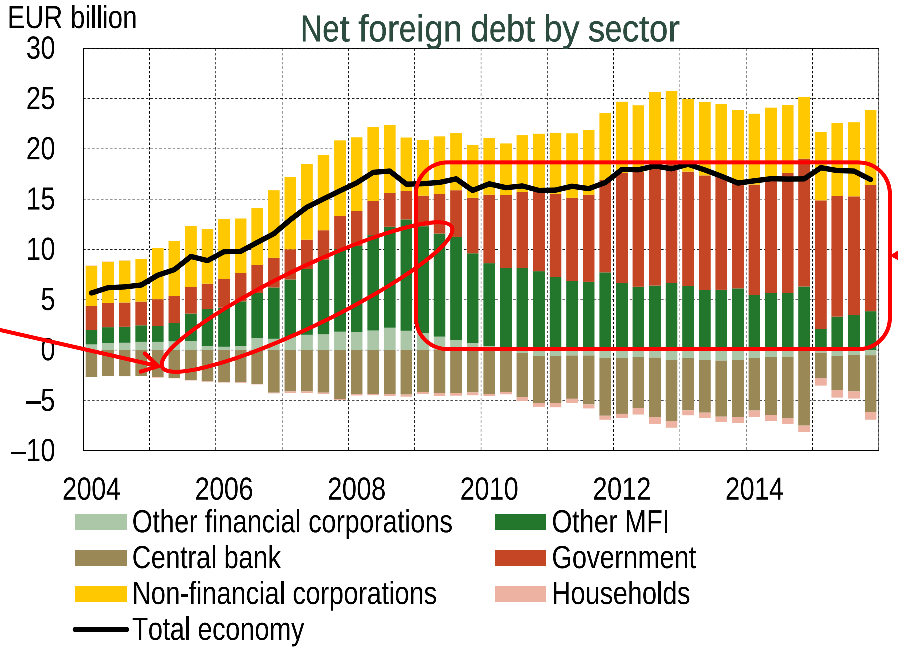
During boom, investment vastly exceeded saving, resulting in large current account (CA) deficits



Note: 4 quarter moving sums.
Sources: Statistics Lithuania and Bank of Lithuania.

CA deficits were mainly financed by “hot” capital inflows through the banking sector

Banks rapidly accumulated net foreign debt from parent banks



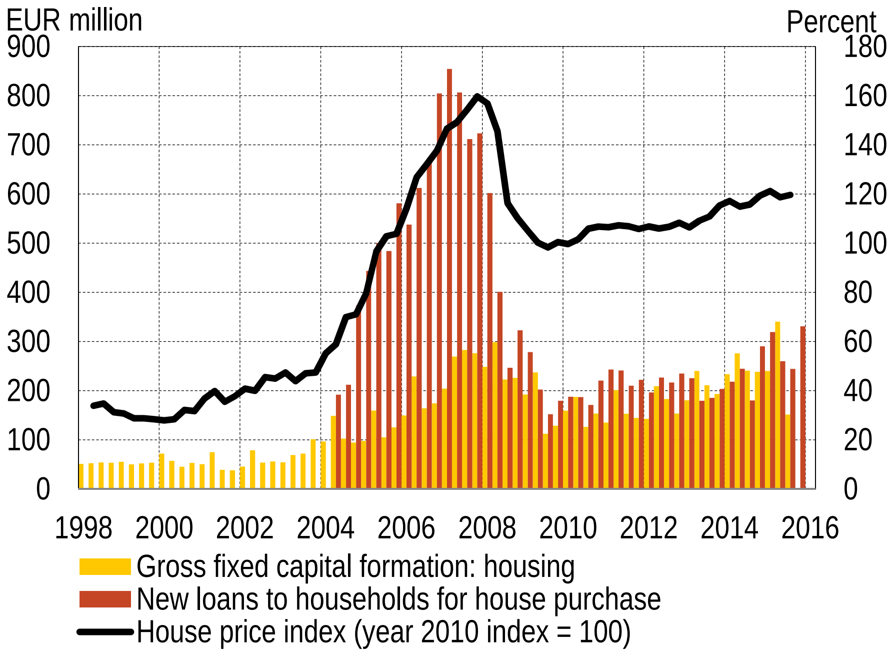
Foreign financing flowed from the banking sector; outflows were almost exactly offset by stepped up government borrowing

Annualised data
Source: Financial accounts of Lithuania.

Trade deficits were closely linked to excessive credit

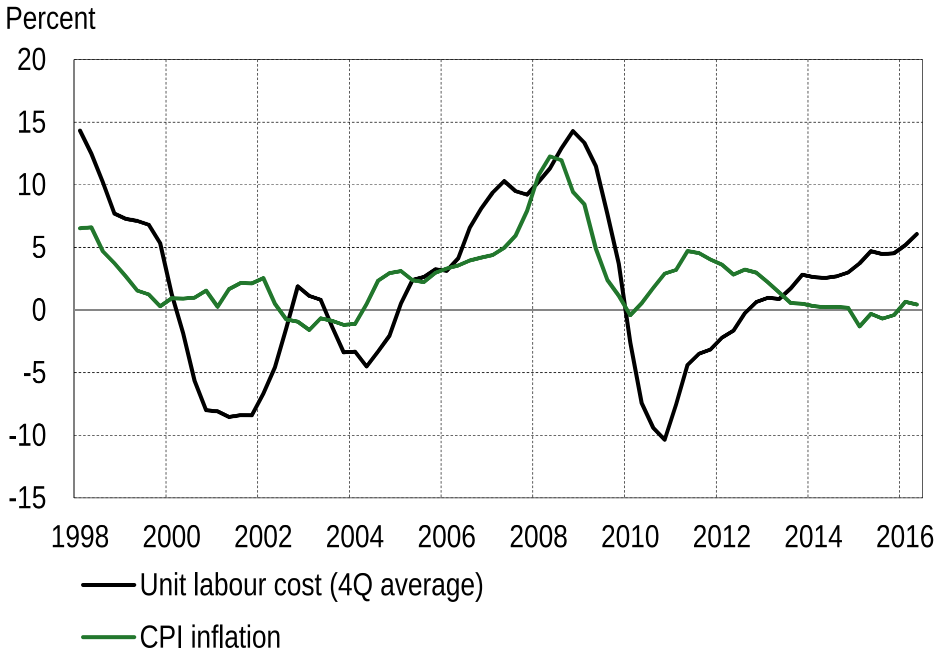
** 4 quarter moving average*
Source: Financial accounts of Lithuania.

Credit-fuelled demand for housing and sluggish supply → explosive house price developments



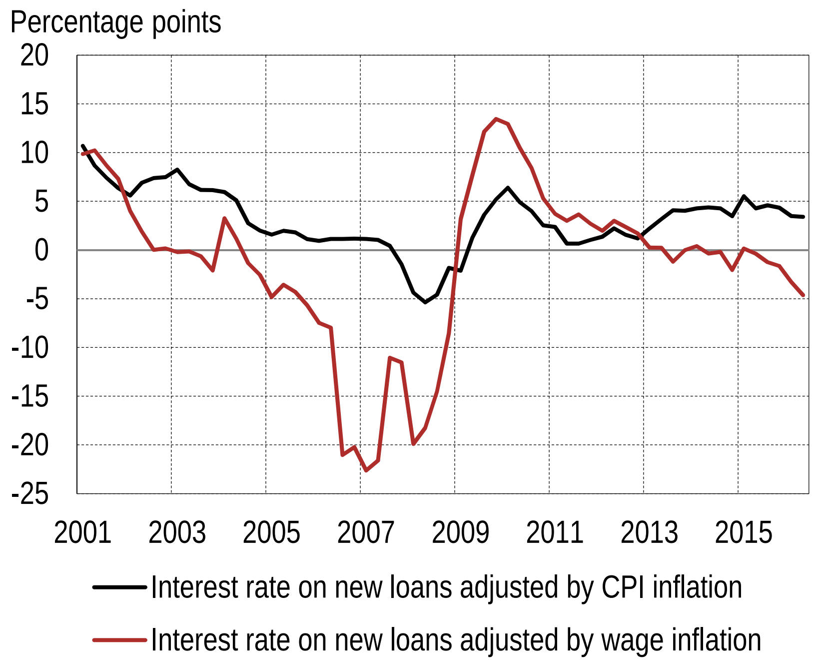
Source: Statistics Lithuania and Bank of Lithuania

Credit-driven domestic demand resulted in wage and price pressures…



Sources: Statistics Lithuania and authors' calculations.

…which in turn lowered real rates.
And who wouldn't borrow at such rates?



Source: Statistics Lithuania and Bank of Lithuania.

What we‘ve learned from the full boom-bust cycle

- Bank credit is a powerful demand-side stimulus but is also often a source of economic and financial imbalances and risks

- Low indebtedness represents some sort of „national resource“, or untapped growth potential, and must be dealt with wisely by policy makers

- Credit shouldn‘t create wasteful spending and excessive purchasing power
  - Macropru policies come to the fore in the low interest rate environment
  - In LT we tend to be on the restrictive side
  - Borrower based measures since 2011: LTV – 85%; DSTI – 40%; Maturity – 30y.

Thank you!

References

- BIS (Bank for International Settlements) 2016: *86th Annual Report.*
- Jakab Z., Kumhof M. 2015: *Banks Are Not Intermediaries of Loanable Funds — And Why this Matters*. Bank of England, Working Paper No. 529.
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