



NÁRODNÁ BANKA SLOVENSKA  
EUROSYSTEM

# **QE – Main Channels and its Impact (incl. impact exercise for a small-open economy Slovakia)**

Jan Toth  
Deputy Governor  
National Bank of Slovakia



# QE basics

# Central banks' balance sheets



- ECB outright purchases could amount to closer to Fed/BoE levels only by 2019 ...

## Central banks' balance sheets and the monetary base

	<b>Monetary base (% of GDP)</b>	<b>Outright purchases (% of GDP)</b>
	July 2015	July 2015
<b>ECB (Eurosystem)</b>	<b>15.2</b>	<b>5.2 -&gt;18.7% by 2019</b>
FED	22.7	24.3
Bank of England	21.7	20.9
Bank of Japan	66.0	63.5

Source: ECB, Federal Reserve, Bank of England, Bank of Japan, NBS (2019 estimate).



Assumption: markets for various assets segmented

- **Signalling effect:** interest rates remain low for longer period -> fall of long-term interest rates (FG, OMT, QE/CE).
- **Direct support of demand:** reduction of credit price and decline of risk premium (TLTRO, Funding for lending, QE/CE).
- **Portfolio effect:** I get cash and I would like to invest it into interest bearing assets – it reduces long-term interest rates and risk premium (QE/CE, TLTRO, Funding for lending).
- **Exchange rate** – loosening monetary conditions for exporters (QE)



- If bonds are sold by institutional investors, often non-residents (not just by local banks), little impact ?  
**No**, if the money decides to leave EA -> weaker euro, if it stays, the usual portfolio rebalancing channel (eg, EA equities).
- QE **reduces divergent development** within the euro area, as it helps more periphery economies (larger space for decline of interest rates).
- QE allows banks to rebalance their debt portfolio (reduction in so called **home bias**, which is an issue for Banking Union).
- Effect on bank **capital** likely to be **positive** (capital gains+lower funding costs+higher volumes > lower NNI due to flattening of yield curve)

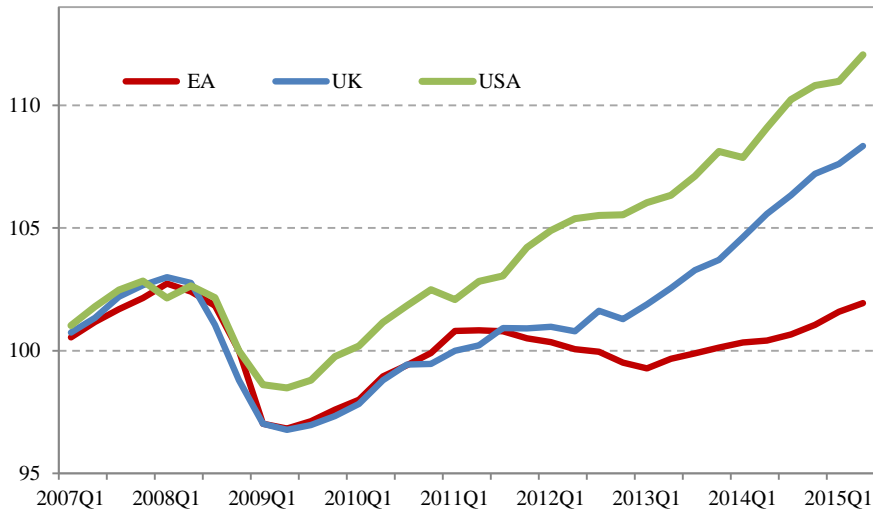


US and UK with QE  
vs.  
EA without QE

# EA economy lagging behind US and UK



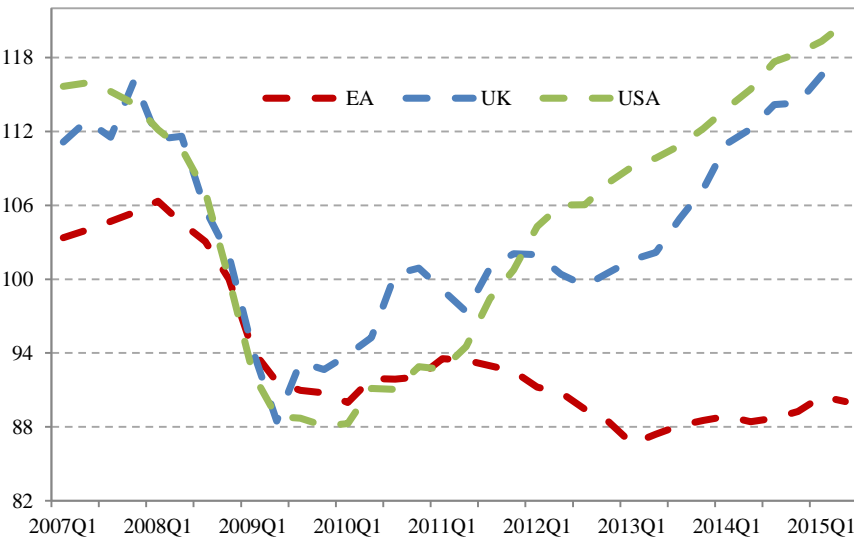
GDP



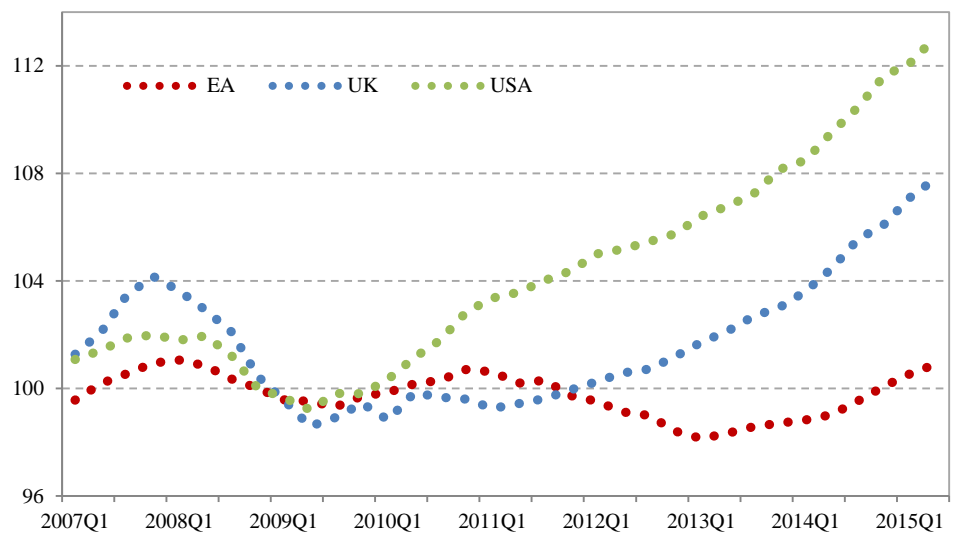
**Weaker demand in EA – both consumption and mainly investment.**

In comparison with the period, when QE in US started, EA GDP increased only moderately, while in US it rose by approx. 12%. In UK, output exceeded its pre-QE level by more than 8%.

Investment



Consumption



Source: Eurostat, NBS calculations,

Note: index USA and EA is 100 in 4Q2008, at beginning of QE in USA, in UK the index in 1Q2009 (beginning of QE in UK) has the same value as in EA.



Weaker demand in EA led to the slower price growth. QE in US and UK helped to increase trend inflation to around 2%, while in the same time in EA it was only modestly above 1%.

Average level of core inflation one year after the introduction of QE in US up to the March 2015 - <b>difference 0,6%</b>	
USA	1,7%
EA	1,1%
Average level of core inflation one year after the introduction of QE in UK up to the March 2015 - <b>difference 1%</b>	
UK	2,2%
EA	1,2%





# QE Impact on EA



(incl. credit easing measure)

10Y EA bond yields down 120bp

Cost of credit fell by 80bp in EA, more so in periphery  
= 100bp policy rate cut + faster transmission

Extra 1% GDP growth in total during 2015-2017

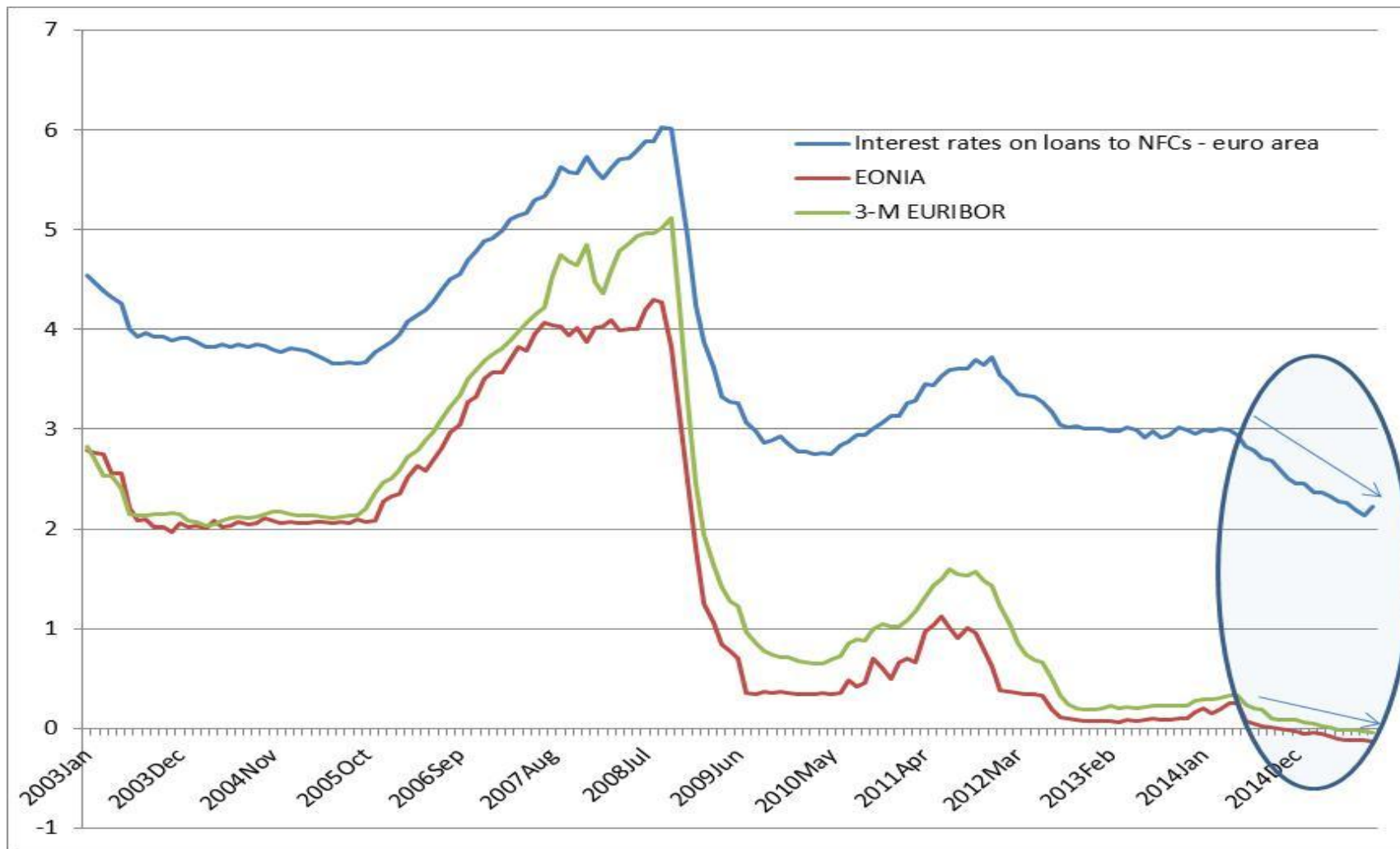
0.5% increase in inflation in 2016 and 0.3% in 2017

Source: Draghi, 3 December 2015 Press Conference

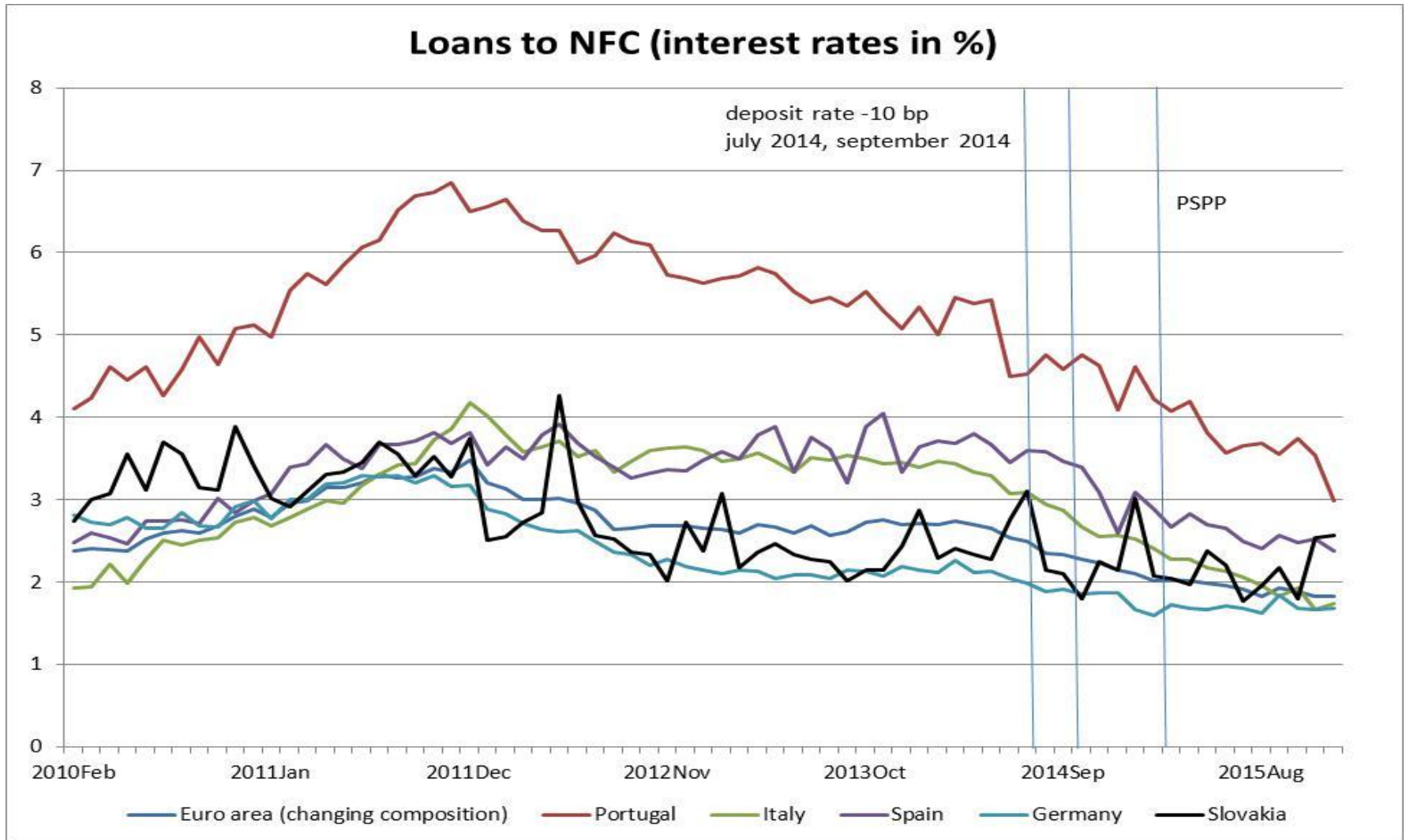


# Interest rates

# QE having big impact on NFC loans in EA ...



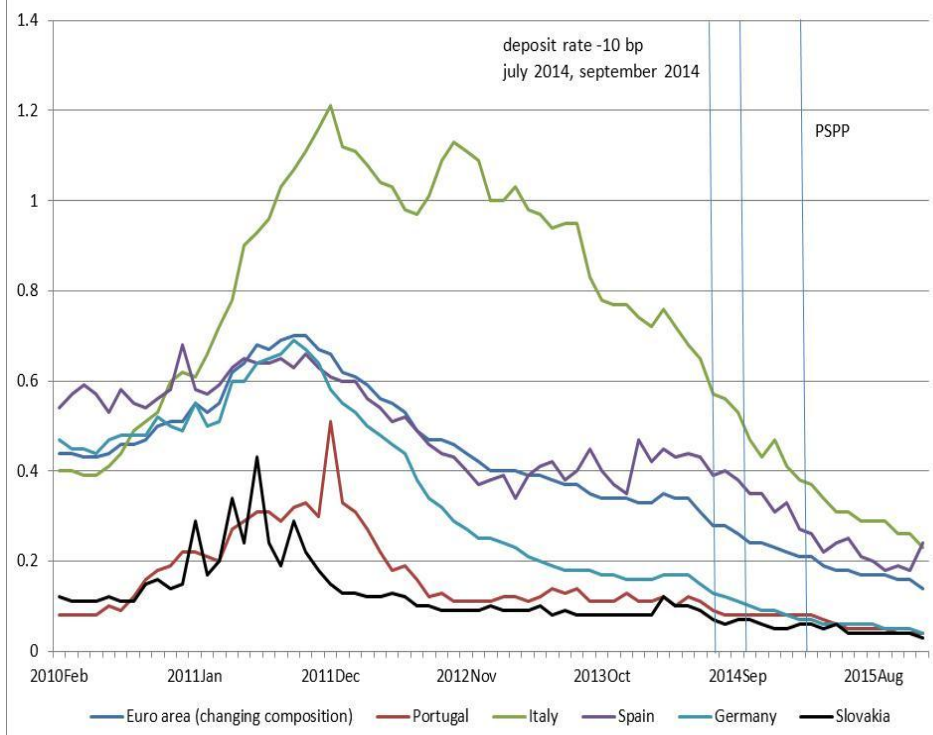
# ... especially for EA periphery



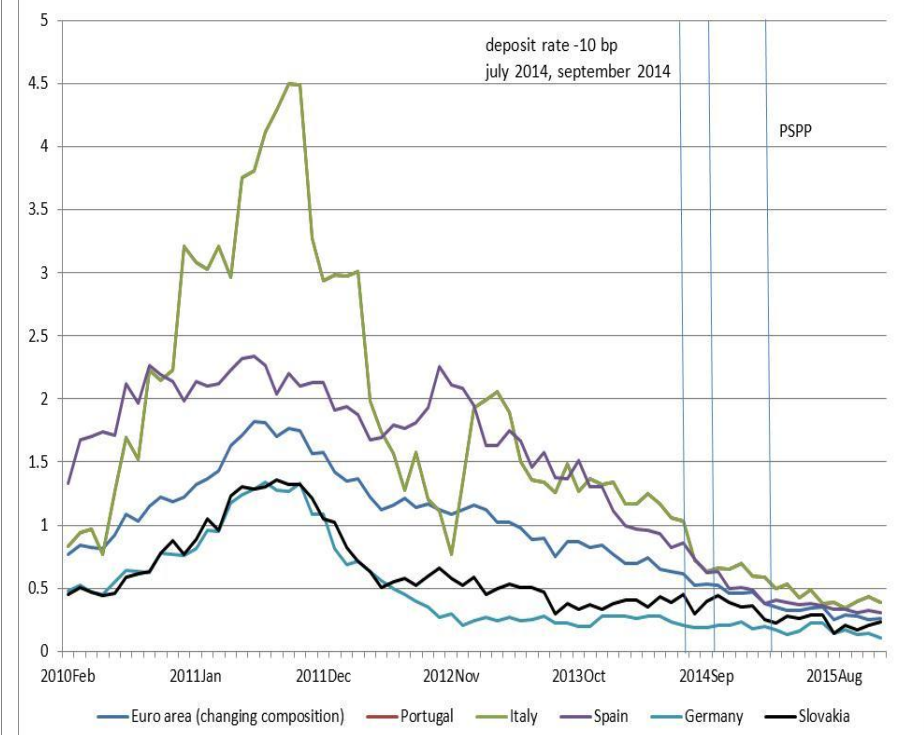
# Deposits for corporates still at + rates ...



### Overnight deposits of NFC (interest rates in %)



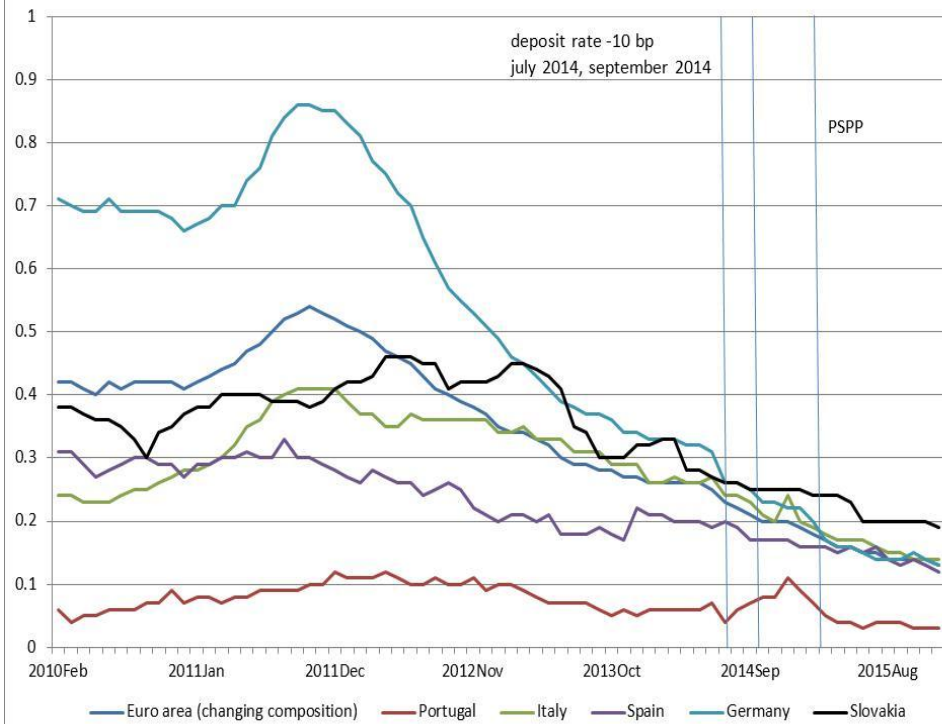
### Deposits of NFC with agreed maturity (interest rates in %)



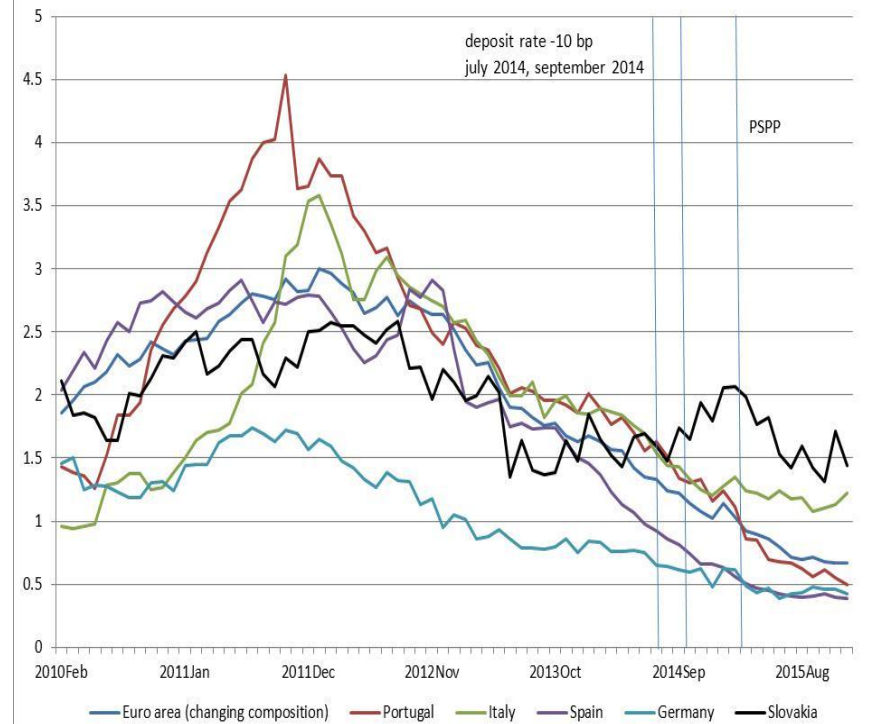
# ... and even more so for households



### Overnight deposits of HH (interest rates in %)



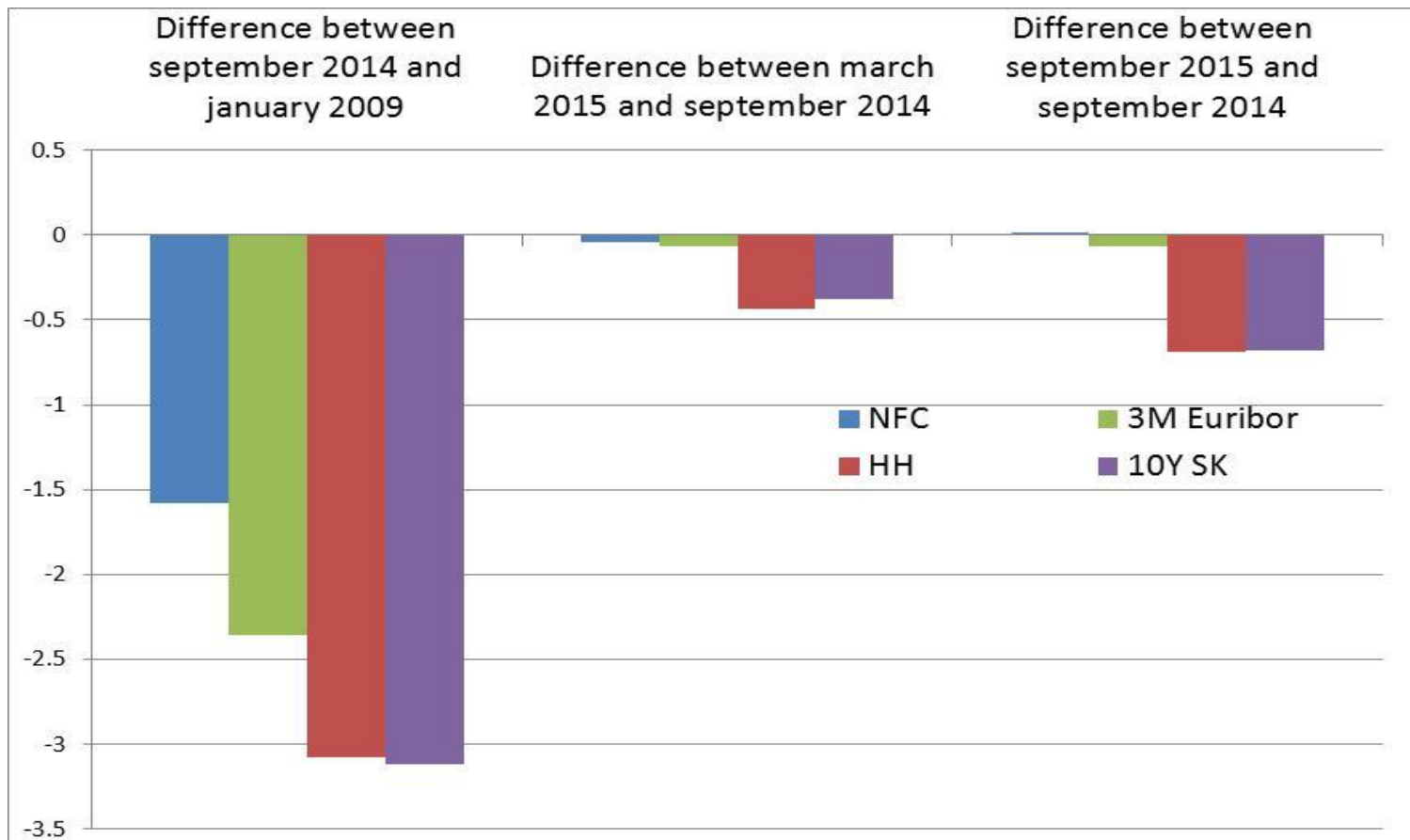
### Deposits of HH with agreed maturity (interest rates in %)



# QE1: Pass-through to private debt prices in Slovakia



Households have benefited most as loan prices more sensitive to longer-end rates. Corporate debt pricing mostly according to short-term rates.







## Anecdotal evidence:

Corporate loans priced at  $\text{Max}(\text{euribor}, 0) + \text{spread}$

Negative depo rates only for institutional clients and very few very big corporates

Household loans have much more fixed rate loans and hence benefited the most by QE

Household deposits all priced at + rates

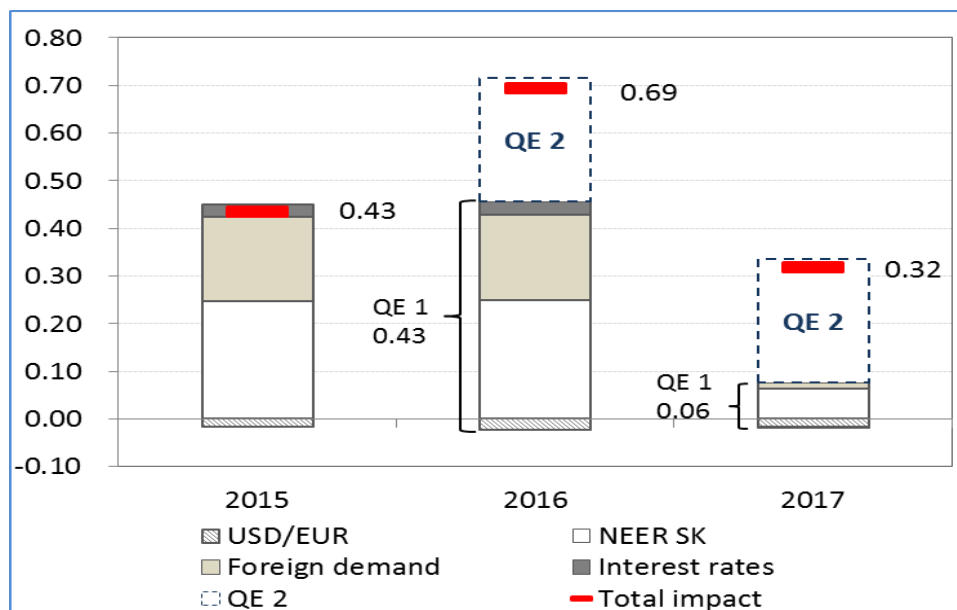


# QE Impact on small open economy (A case of Slovakia)

# Estimation of QE on Slovak GDP growth and inflation rate



*Impact on GDP growth*



*Impact on inflation rate*

