

3. The role of credit and the essence of money creation in and destruction in the current system

Mojmír Hampl, MSc., PhD.



EVROPSKÁ UNIE
Evropské strukturální a investiční fondy
Operační program Výzkum, vývoj a vzdělávání

MŠMT
MINISTERSTVO ŠKOLSTVÍ,
MLÁDEŽE A TĚLOVÝCHOVY



Central Banking Golden Statements

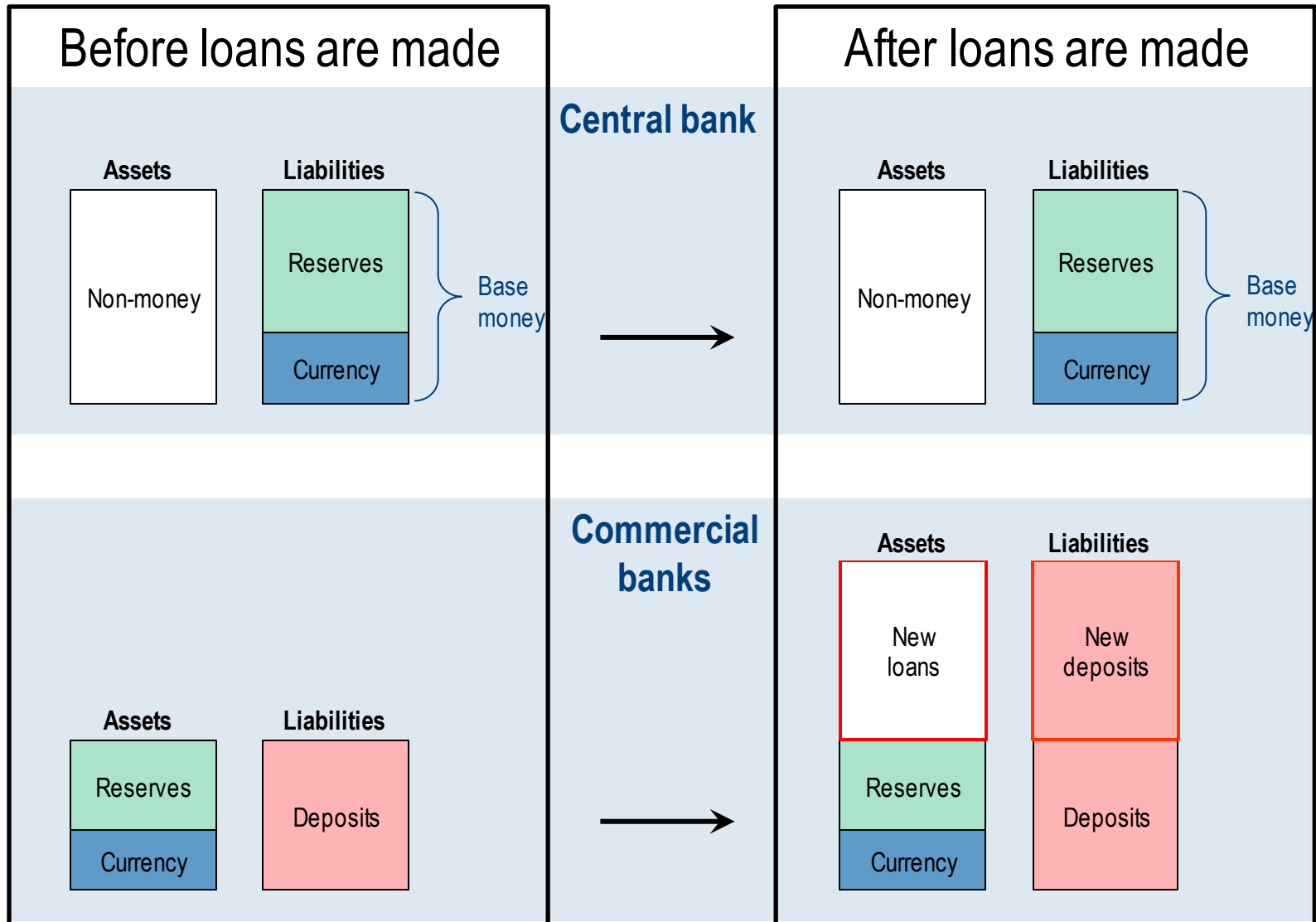
Please read the following statements. Some are “common sense,” some appear in the best-known textbooks. Which are always true, which are sometimes true, and which are false? Look at + consult the previous lecture

1. The central bank controls the money supply
2. Increasing CB balance sheet means printing money
3. Monetary policy creates the business cycle
4. A modest rise in CPI is not price stability
5. Low (real) interest rates mean stimulus
6. There is no independent monetary policy with a fixed exchange rate

Elastic Money vs. Fixed Money

- The traditional view (still in some textbooks): CB controls monetary base, and via the money multiplier it controls money supply
- Appealing as the multiplier model is an ex-post identity (again consult the previous lecture)
- But causality actually runs the other way round!
- In reality, banks, non-financial firms, and households determine the amount of money via the credit market
- The central bank influences credit market conditions through the short-term interest rate
- Please read: Braun (2016), McLeay et al. (2014), and Jakab and Kumhof (2015)

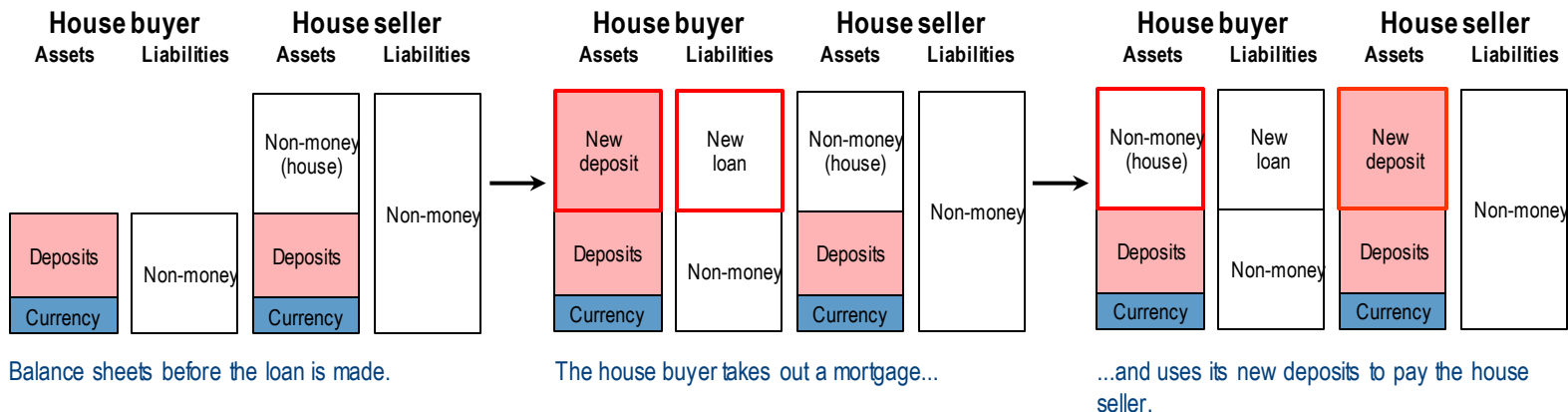
How Does Money Creation Work?



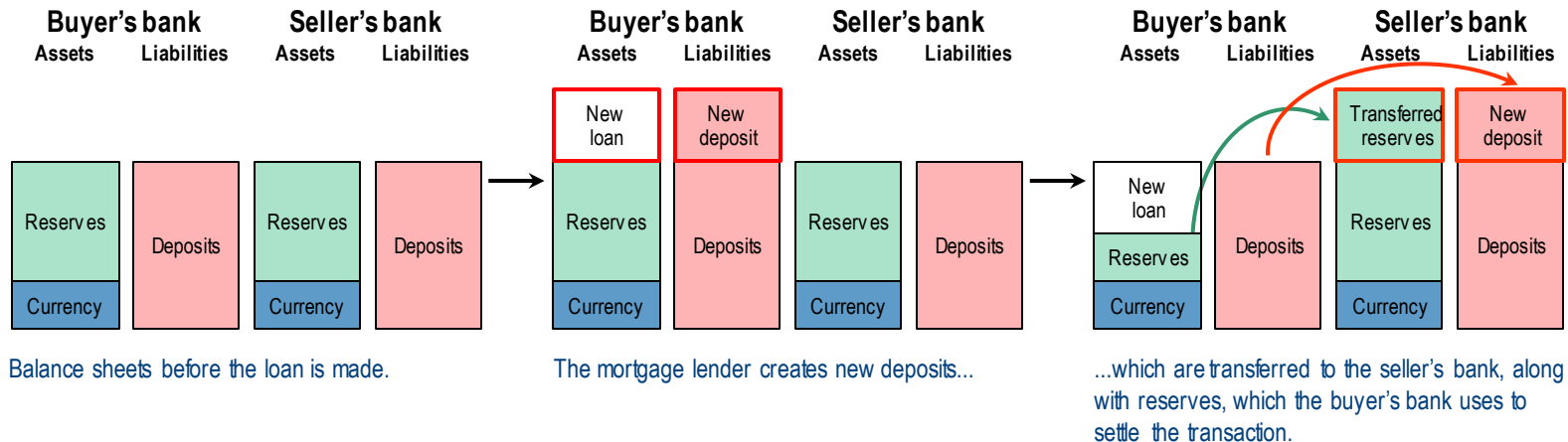
Source: McLeay et al. (2014)

Example: House Purchase (1)

Changes to the balance sheets of the house buyer and seller



Changes to the balance sheets of the house buyer and seller's banks

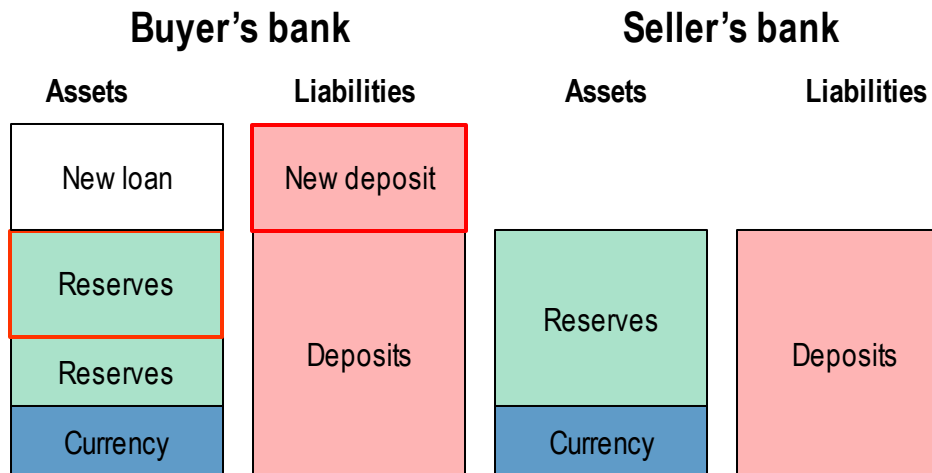


Source: McLeay et al. (2014)

Example: House Purchase (2)

But settling all transactions this way would be unsustainable:

- The buyer's bank would have fewer resources to meet its possible outflows
- If it made many new loans, it would eventually run out of reserves



Source: McLeay et al. (2014)

So the buyer's bank will in practice seek to attract or retain new deposits.

The magic of creating money with a „stroke of the pen“:



Paying with a credit card increases the money supply...

Source: <https://badrol.web.app/bpi-credit-card-points-redemption-2020.html>



...while paying with a debit card does not!

Source: <https://www.hindibasics.net/emv-chip-debit-card-kya-hai/>

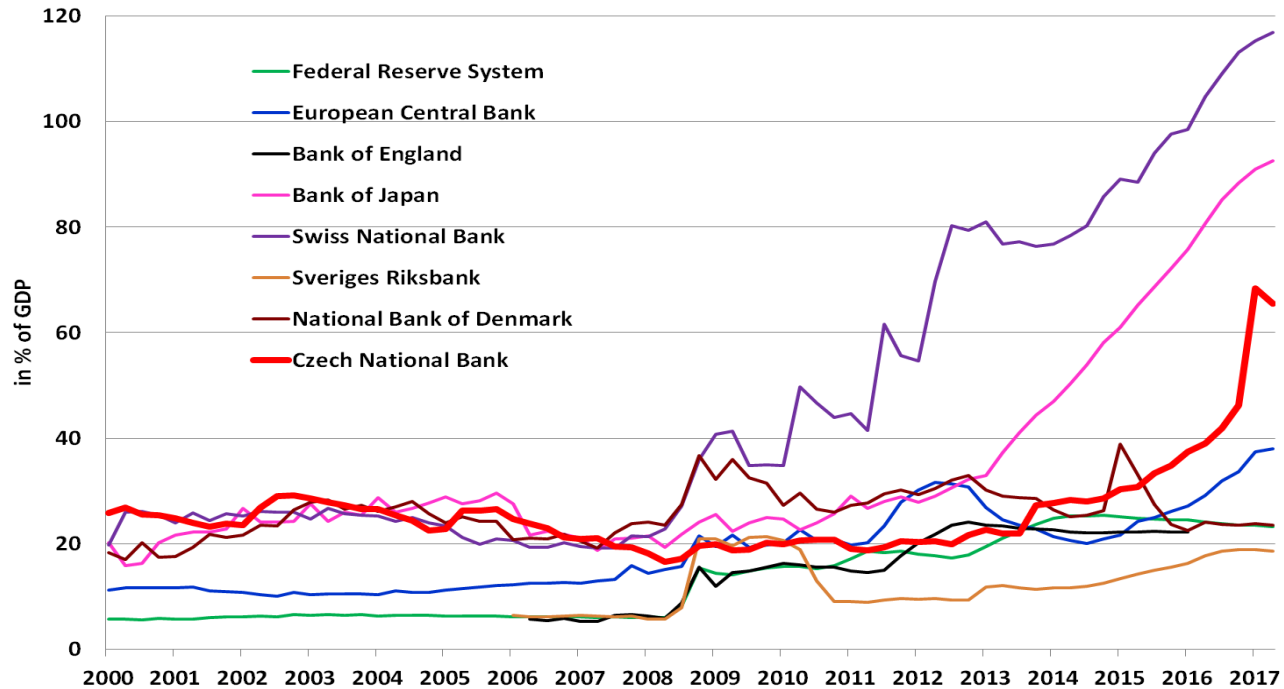
The essence of monetary policy in the elastic money system in a nutshell:



Source: Author

It has got profound implications for the day-to-day practice of central and commercial banking

QE, FX Interventions or popular „money printing“ - really?

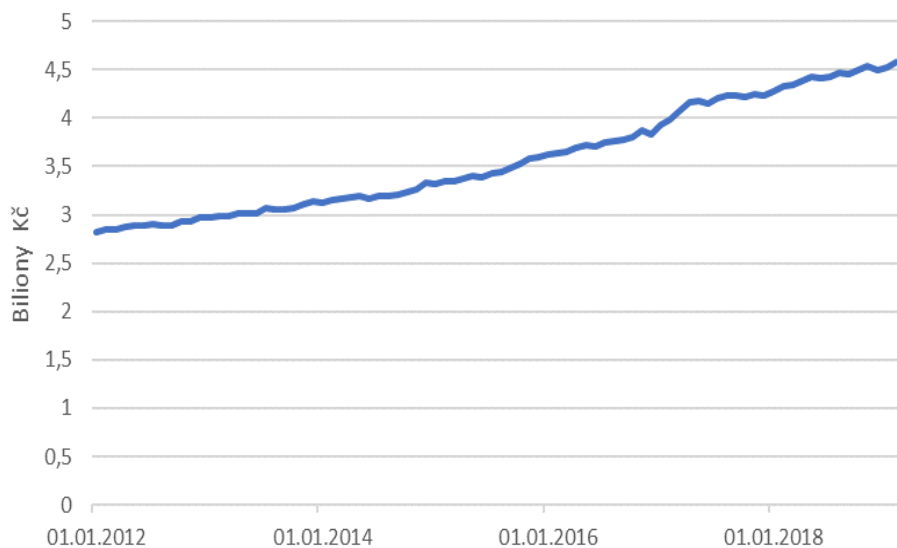


SOURCE: BIS

MONETARY AGGREGATES and CNB's ASSEST: 2012 – 2018

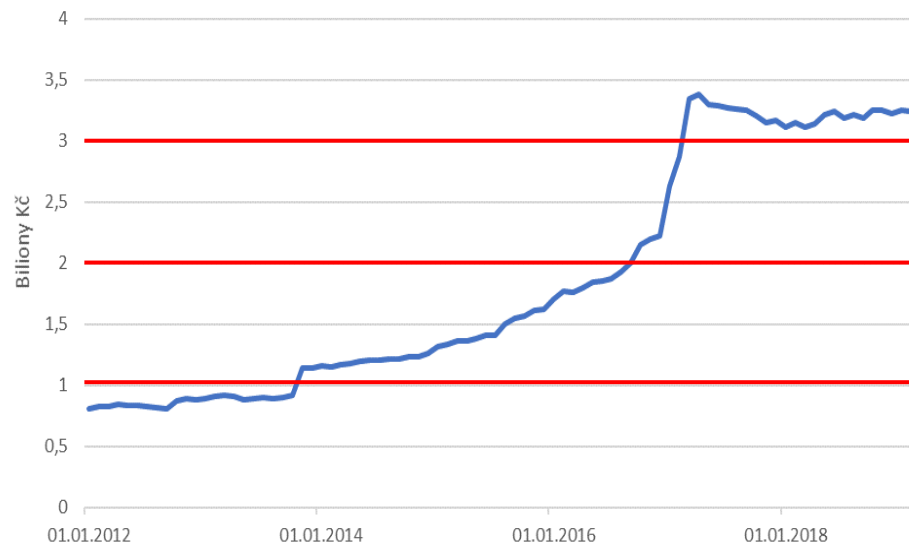
In absolute terms 4,5 trn vs. 2,8 trn CZK (+ 60%)

M3



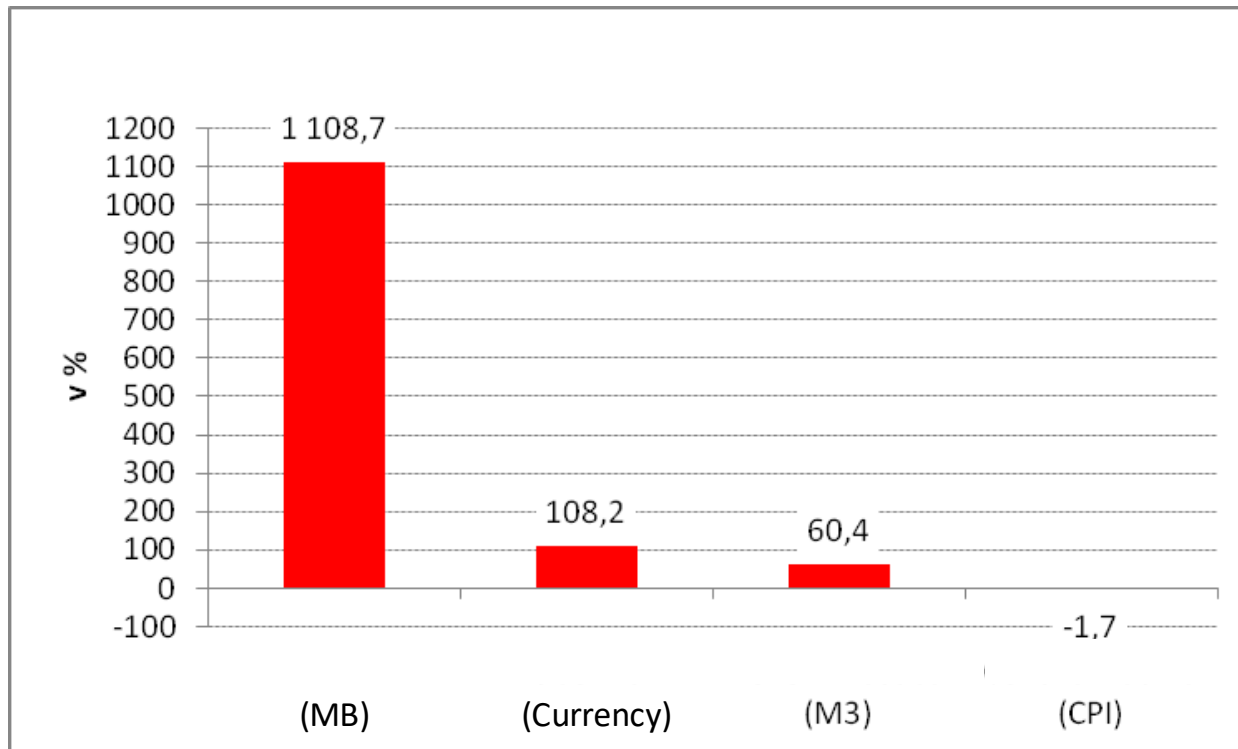
In absolute terms 3,2 trn vs. 0,8 trn CZK (+ 400%)

ASSETS OF THE CNB



SOURCE: CNB

A nice example: Switzerland 2008-2017



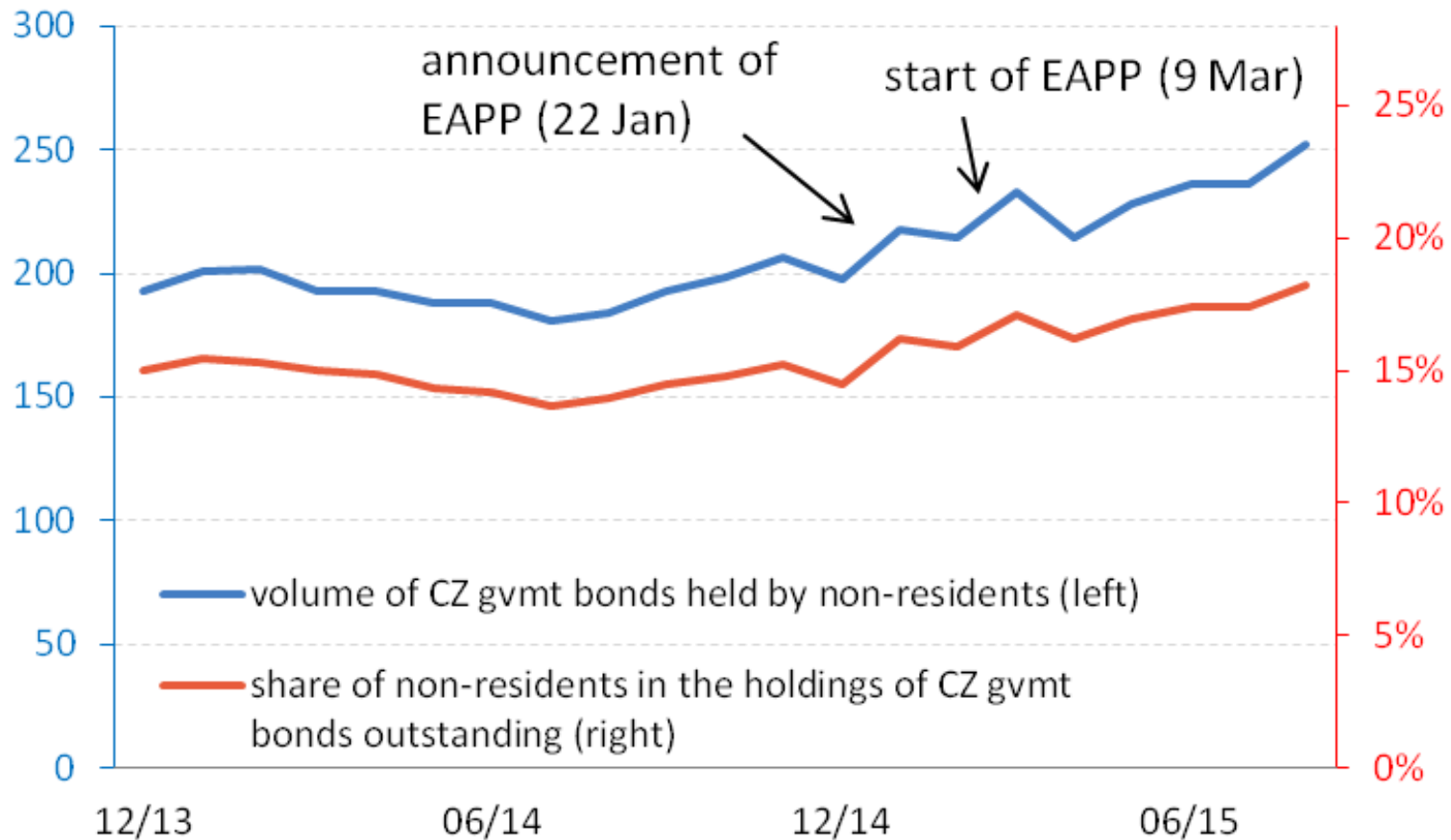
SOURCE: NATIONAL BANK OF SWITZERLAND

QE is not typical money printing, yet it might have also positive cross-border impacts!

Two types of spillover effects

- Potential effects of the APP (i.e. the ECB's QE) on smaller economies:
 1. Via financial markets ... immediately;
 2. Via real economy ... later on.
- Qualitatively, the effects should hold for any volume of the APP (original or expanded or more).

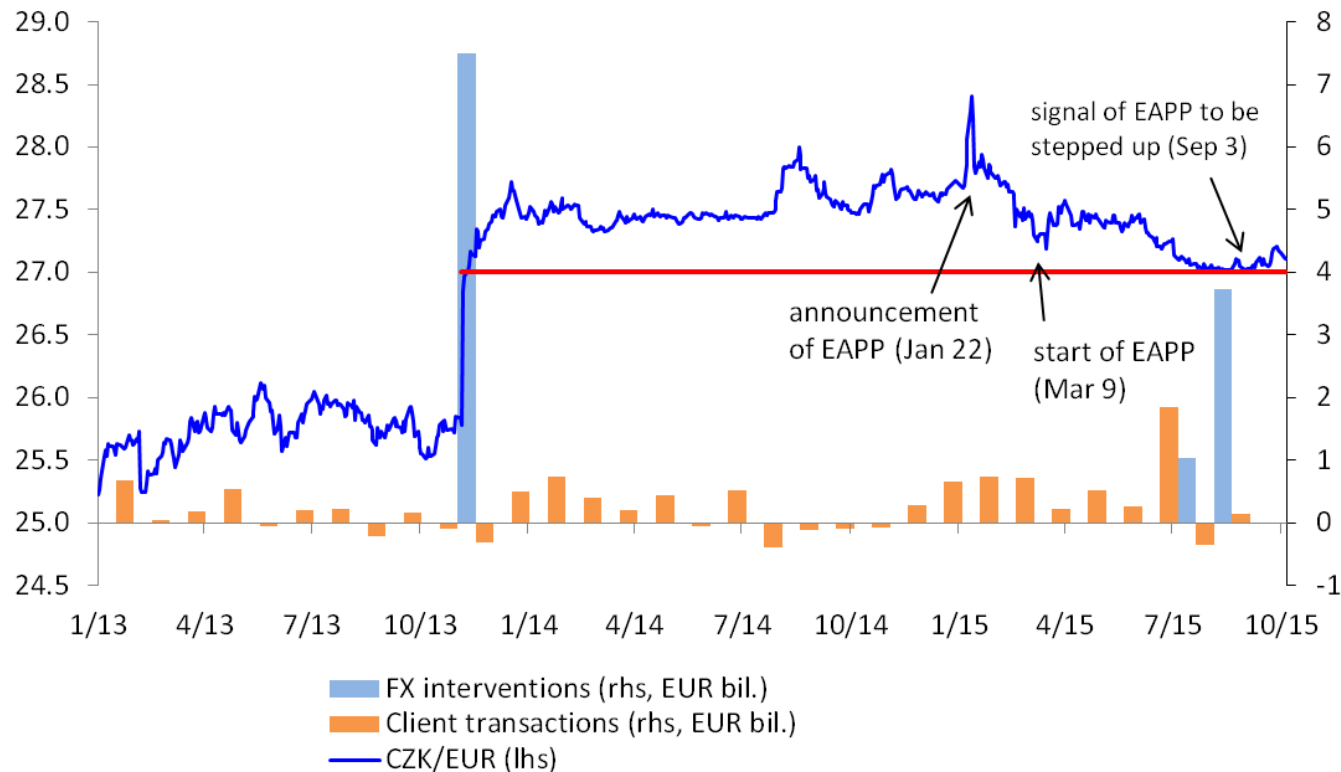
Financial effects: higher demand for CZK assets



SOURCE: MINISTRY OF FINANCE, CNB

Financial effects: appreciation pressures on CZK

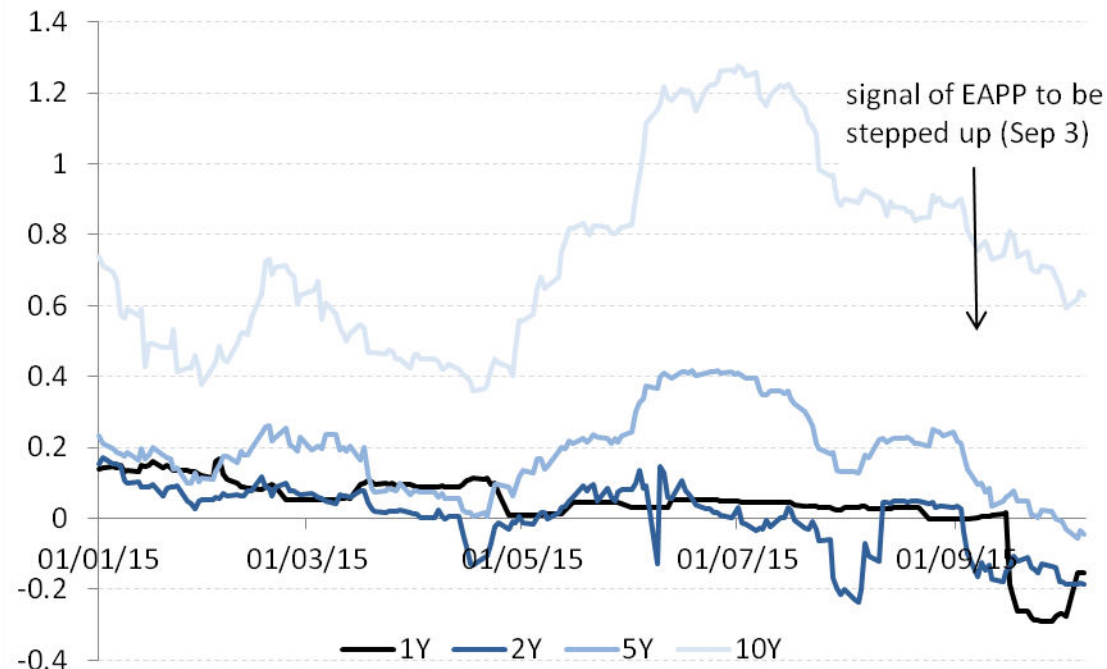
- The CNB maintained an ER floor at CZK 27 to the euro.
 - Since November 2013 until 2017. The purpose was to avoid a deflationary spiral and to push inflation back to the target of 2%.



SOURCE: CNB

Financial effects: lower domestic yields

- Normally, pressures on an ER commitment are not welcome.
- In the Czech case, however, they provided the CNB with ammunition for further monetary easing.
 - The CNB viewed the implications for its balance sheet or losses as being of secondary importance.
- Indeed, the CZK yield curve for Czech government securities up to 5Y has moved below zero.



References:

1. **Aghion, Philippe & Farhi, Emmanuel & Kharroubi, Enisse, 2012.** “Monetary Policy, Liquidity, and Growth.” Working Papers 18072/2012, The National Bureau of Economic Research.
2. **Braun, Benjamin, 2016.** “Speaking to the People? Money, Trust, and Central Bank Legitimacy in the Age of Quantitative Easing.” Discussion Paper 12/2016, Max Planck Institute for the Study of Societies.
3. **Jakab, Zoltan & Kumhof, Michael, 2015.** “Banks Are Not Intermediaries of Loanable Funds – And Why This Matters.” Working Papers 529/2015, Bank of England.
4. **McLeay, Michael & Amar, Radia & Ryland, Thomas, 2014.** “Money in the Modern Economy: An Introduction.” Bank of England Quarterly Bulletin, vol. 54(1), pp. 4-13.

Thank you for your attention!

Mojmír Hampl

mh@mojmirhampl.com