Money creation

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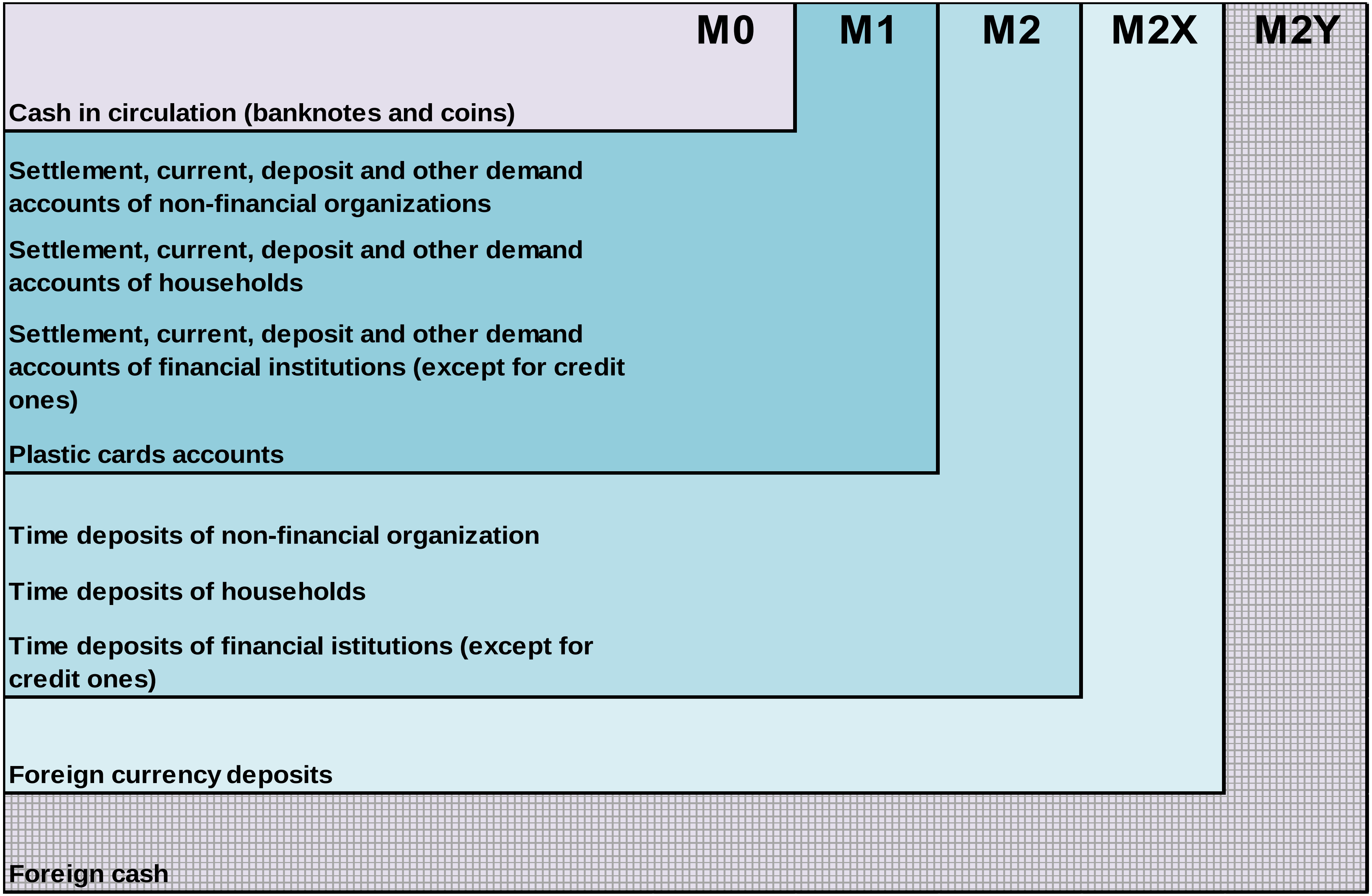
Plan

- Outline the drivers behind money stock growth…

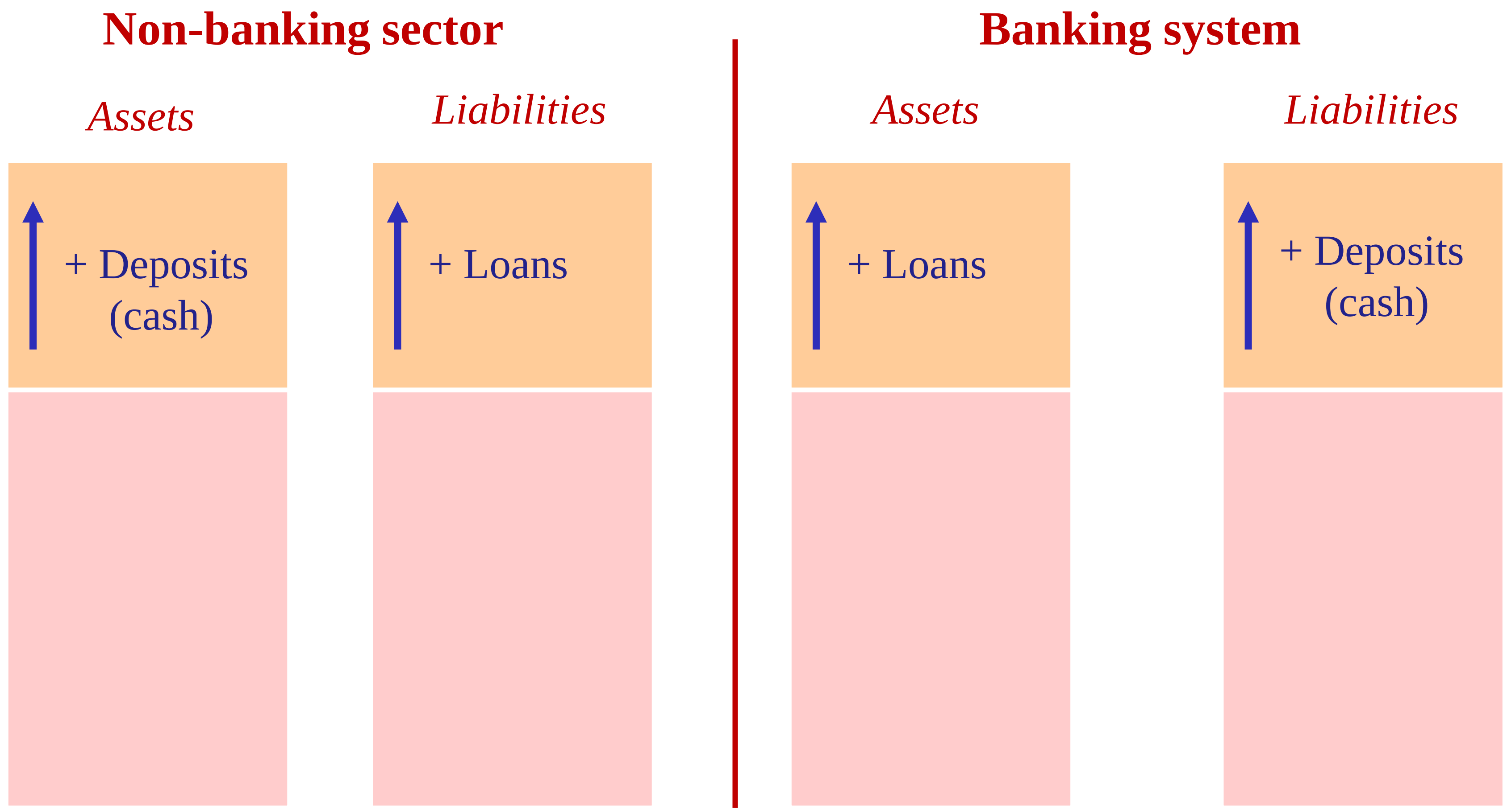
- …with special focus on external transactions…

- … discuss monetary and macroprudential policies implications.

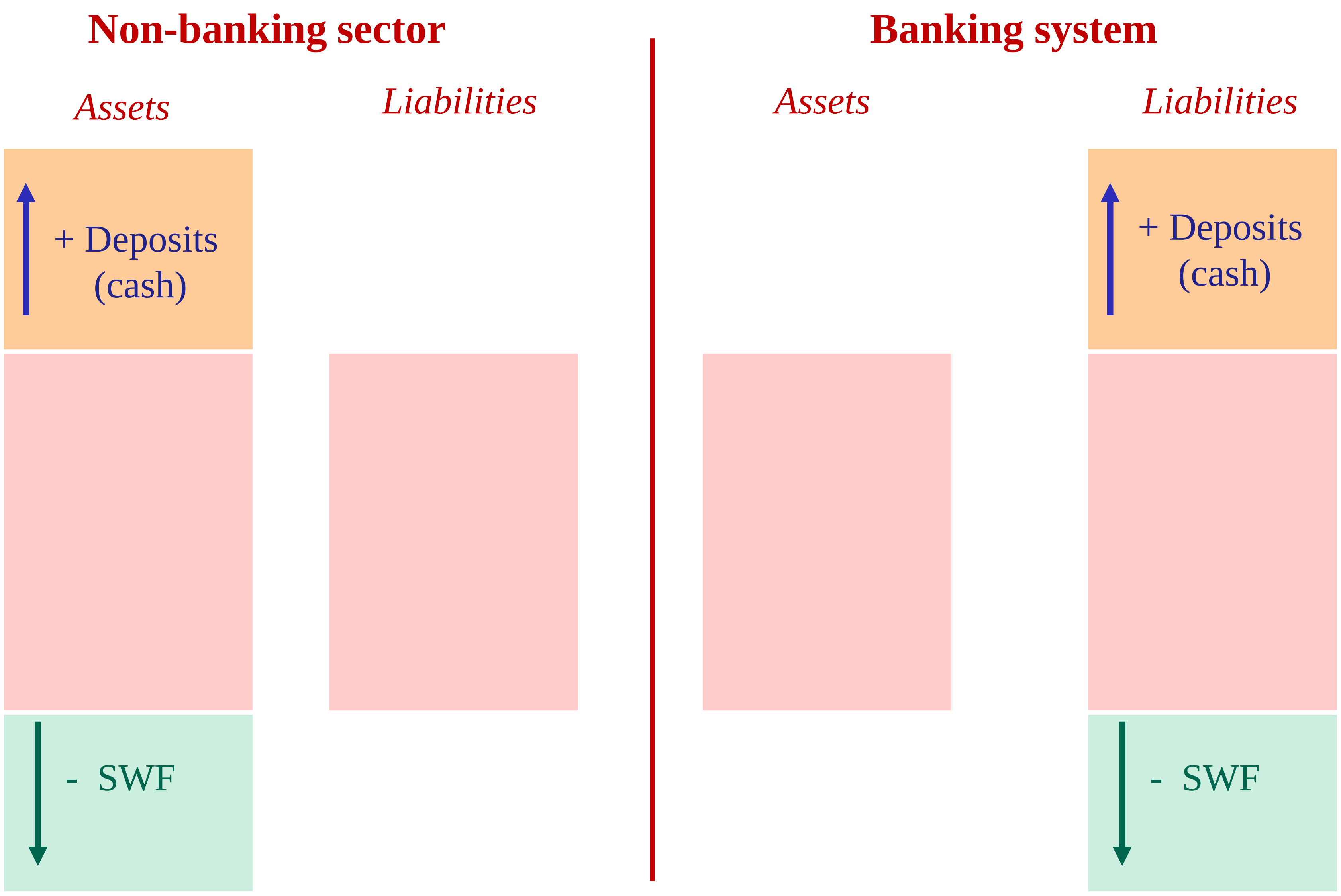
Monetary aggregates



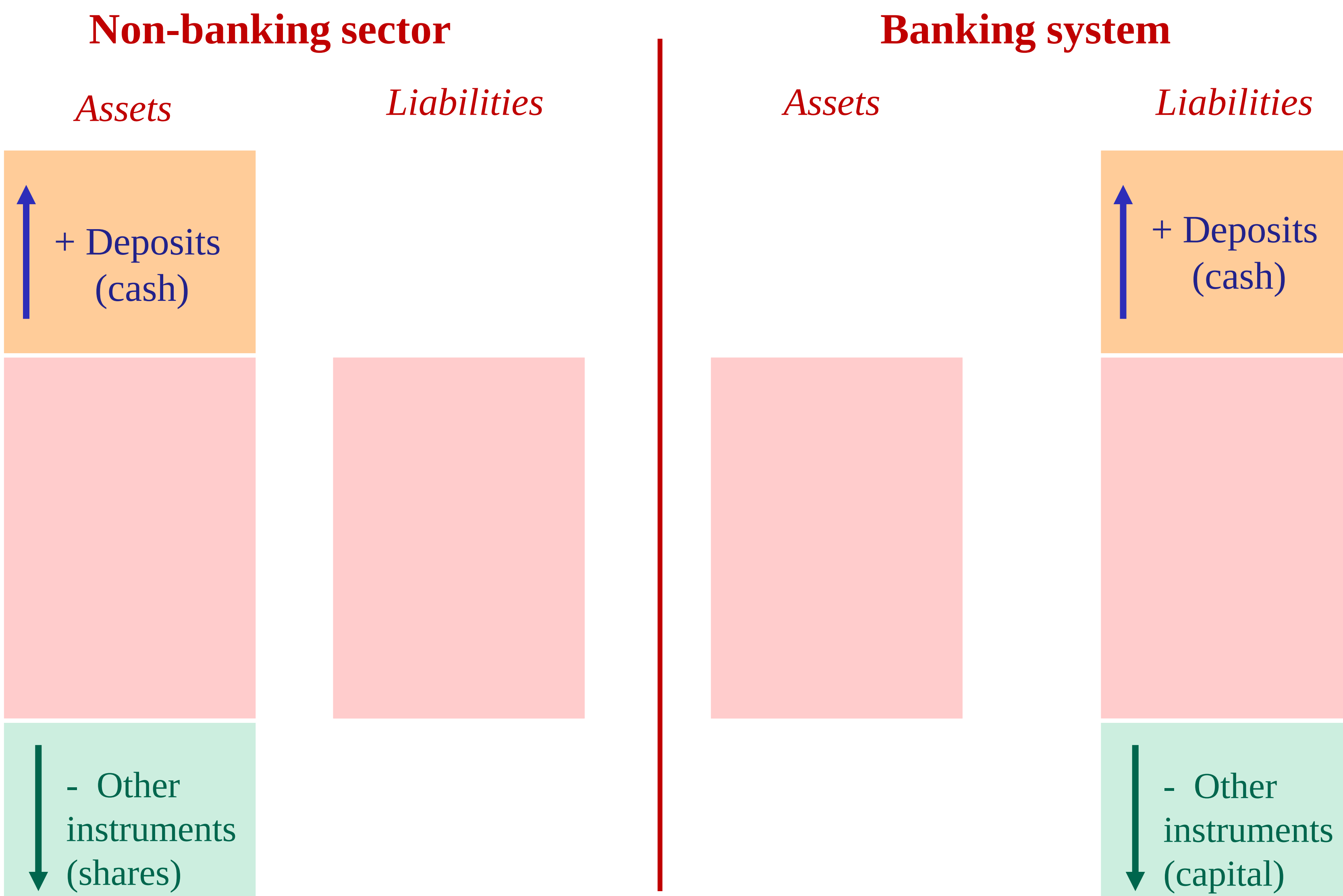
Money creation through credit extension



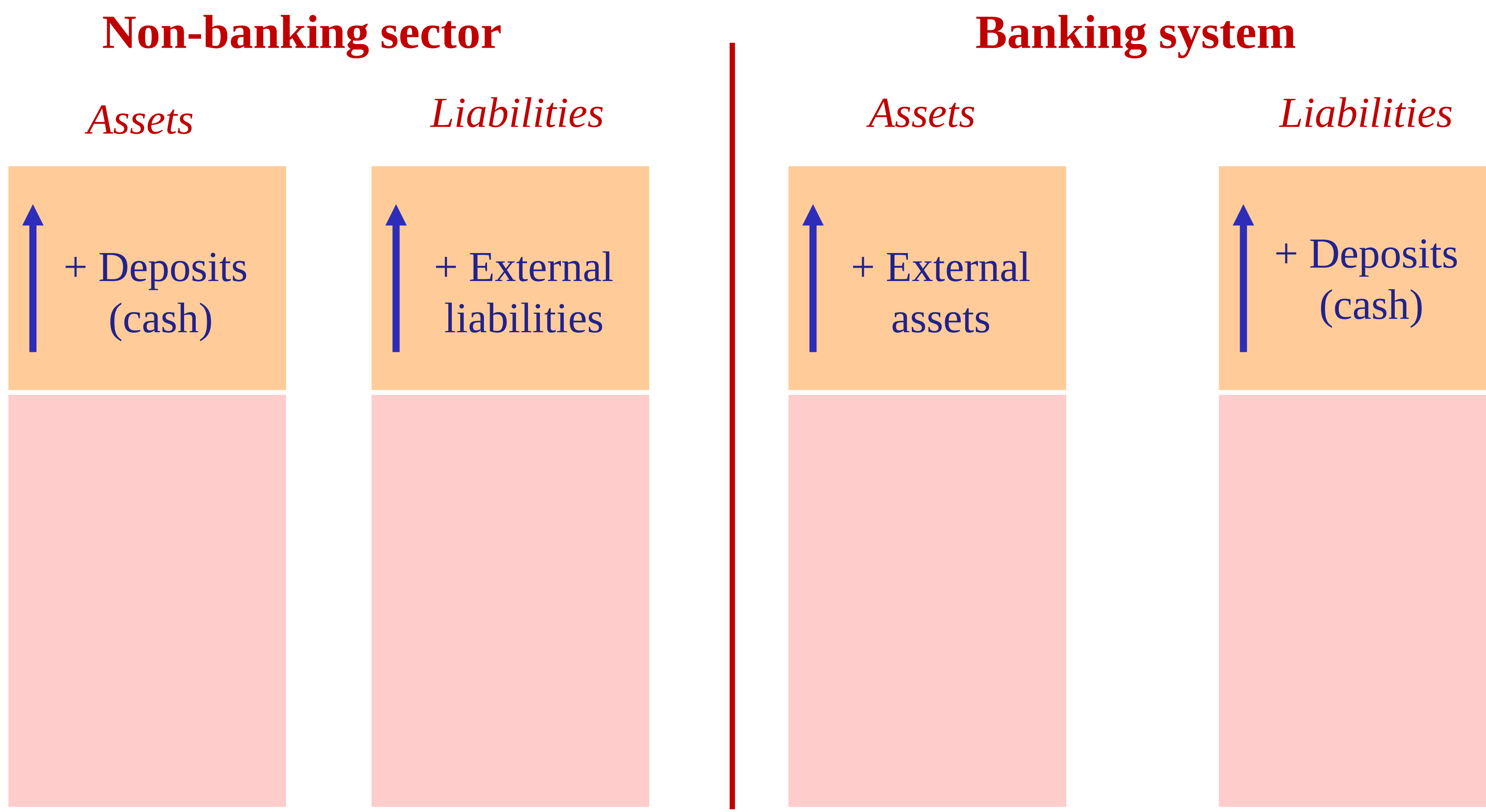
Money creation (absorption) through sovereign wealth fund management



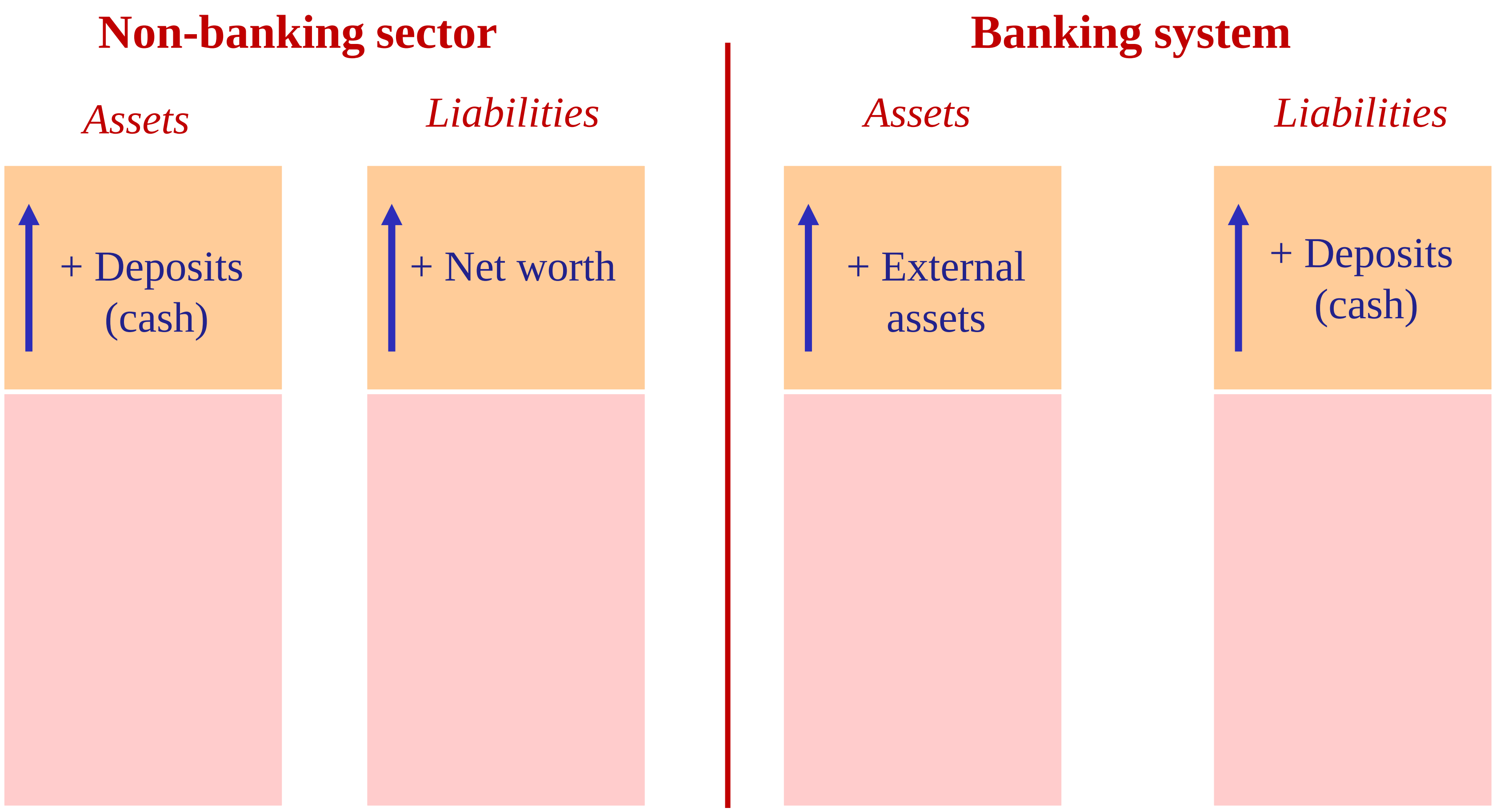
Portfolio shifts from (to) other instruments



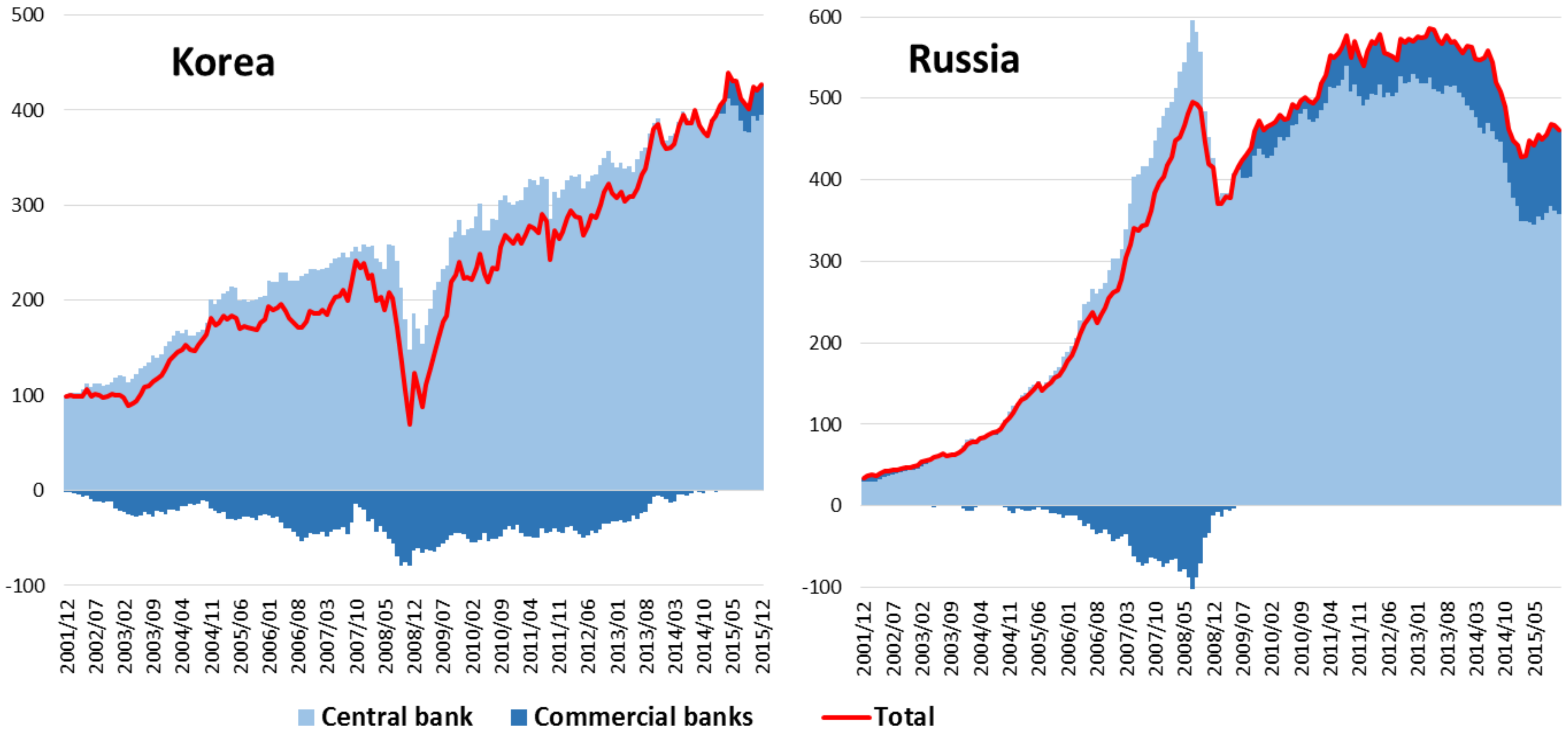
Money creation through external transactions: *<u>capital inflows</u> to the non-banking sector*



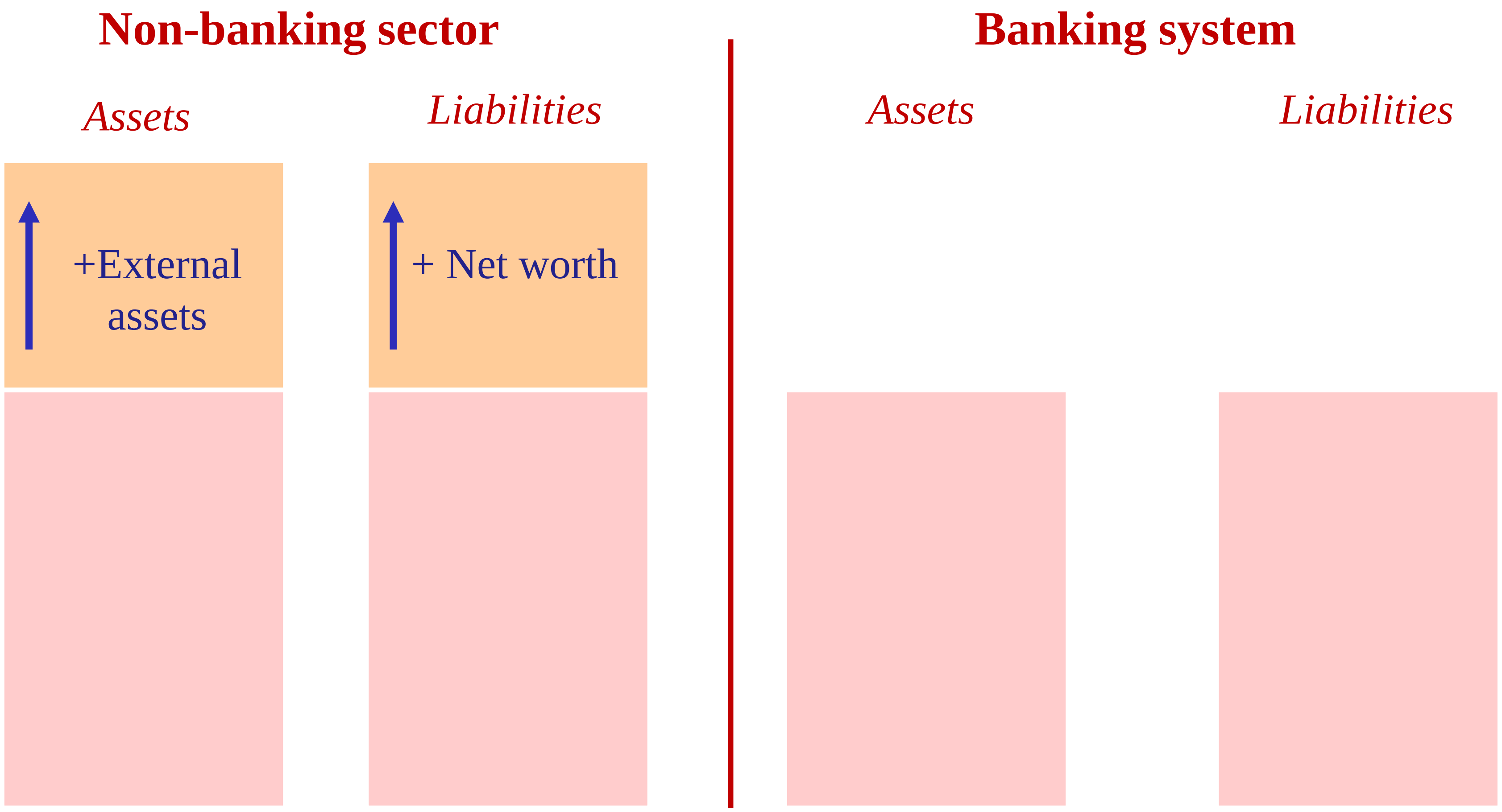
Money creation through external transactions: *<u>non-financial transactions</u> of the non-banking sector*



Net foreign assets of the banking system (bln. USD)



Money creation through external transactions: *uncommon for emerging markets...*

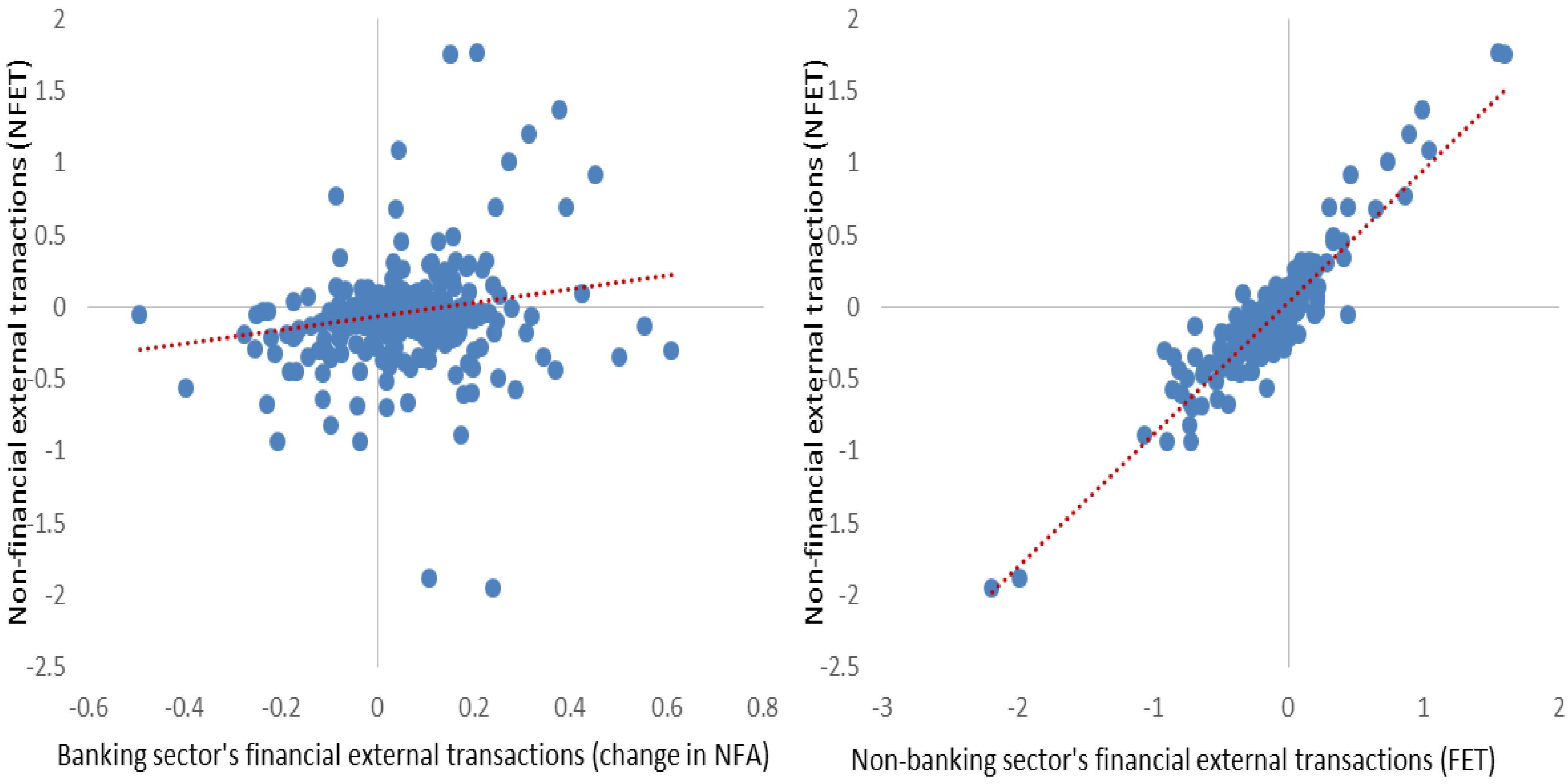


Countries in the cross-section

Armenia	Iceland	Philippines
Azerbaijan	Indonesia	Poland
Belarus	Kazakhstan	Romania
Bolivia	Korea	Russia
Brazil	Macedonia	South Africa
Bulgaria	Malaysia	Tajikistan
Chile	Mexico	Thailand
Colombia	Moldova	Turkey
Croatia	Mongolia	Ukraine
Czech Republic	Morocco	Uruguay
Egypt	Nigeria	Venezuela
Georgia	Pakistan	
Hungary	Paraguay	

Time series period for Thailand and Venezuela is 2005-2013, for Morocco 2002-2013, for other countries 2002-2014.

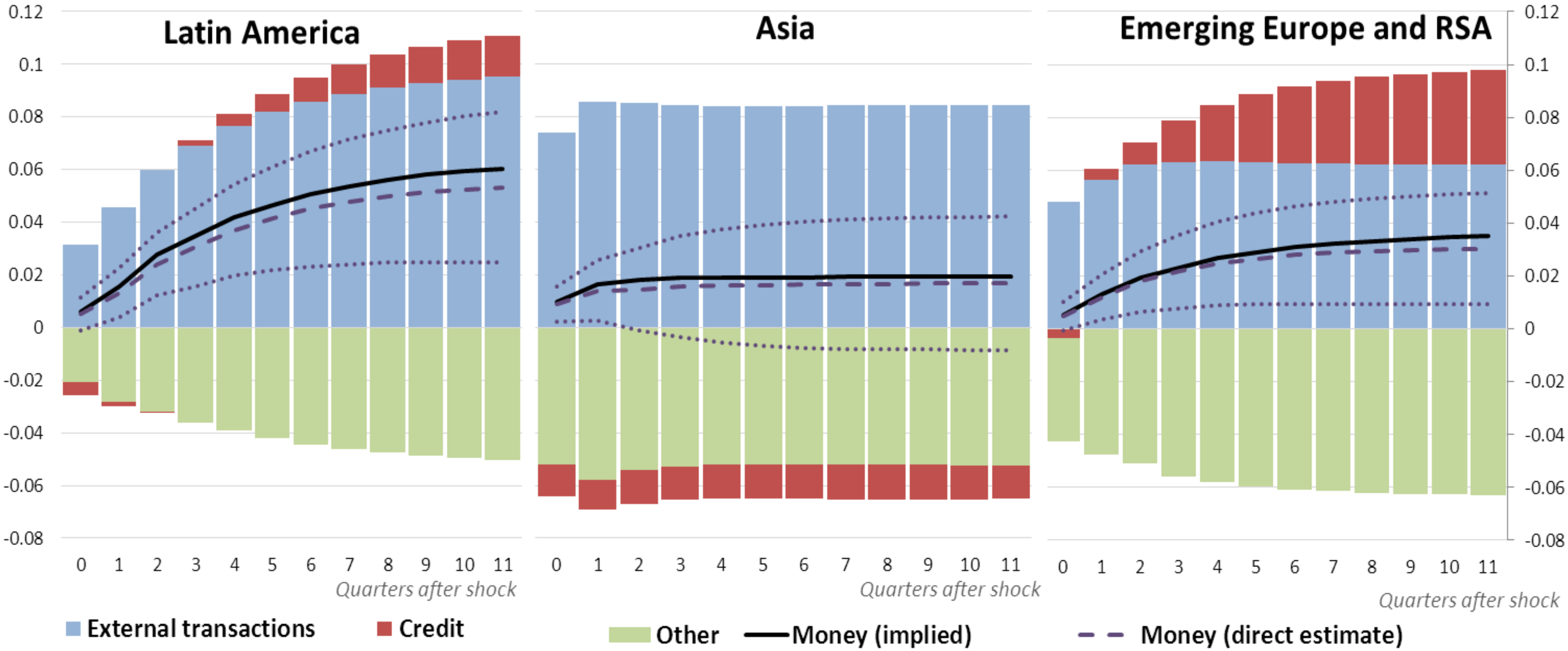
Correlation of non-financial external transactions with financial external transactions in the banking and non-banking sectors



Money creation through external transactions:

… unless driven by central bank's foreign reserves accumulation

Cumulated responses to innovation in central bank's foreign reserves
(ratios to nominal GDP), based on empirical VAR analysis



Flow of funds

$$\Delta D = \Delta C^{P} + \Delta NC^{G} + \Delta NFA + \Delta OTHER$$

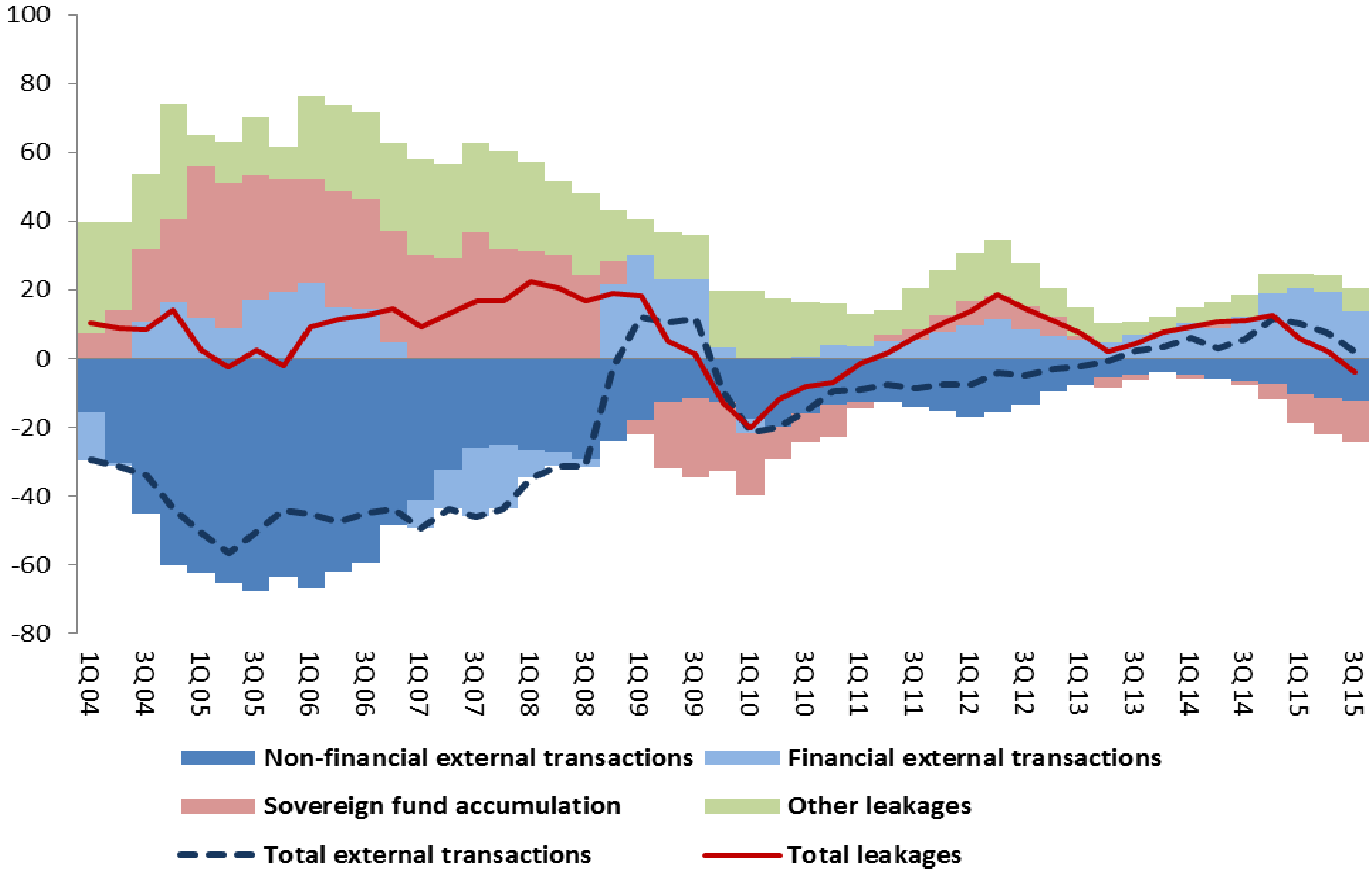
where D is bank deposits, C^P *is credit to the private non-banking sector,* NC^G *is net claims on general government, NFA is net foreign assets of the banking sector and OTHER is the balancing item (notably including cash, equities and other instruments).*

$$\underbrace{\Delta C^{P} + \Delta C^{G} - \Delta D}_{\text{Total leakages}} = \underbrace{FET - NFET}_{\text{Total external transactions}} + \Delta SF + \Delta OTHER$$

where ΔNFA is replaced by its balance of payments counterparts: non-financial external transactions (NFET, proxied by current account surplus) and financial external transaction (FET, calculated as NFET-ΔNFA).

Deposit leakages in Russia

(flows over 12 months, % of deposits)



Conclusions

- Money may be created through external transactions if banks accommodate a inflow/leakage of funds to the foreign sector by accumulating net foreign assets/liabilities…

- … although in an emerging market (which is not in a monetary union) the scope of such fluctuations is thus limited unless driven by changes in the foreign reserves of the central bank.

- Introducing the Net Stable Funding Ratio requirement is likely to trigger an adjustment that will bring the financial and non-financial external transactions of the non-banking sector into balance.