Keynes at the Periphery: Currency Hierarchy and Challenges for Economic Policy in Emerging Economies

Barbara Fritz (Freie Universität Berlin)

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Introduction

New Consensus during ‘Great Moderation’:

- “Inflation targeting is Bretton Woods, reversed” (Rose 2007)
- Domestic level: Inflation targeting + adequate domestic policies for price stability
- Adjustment to external shocks: floating exchange rates + free cross-border capital mobility
- International financial system: equal stability for advanced and developing economies

Double systemic crisis:

- Series of financial crises in emerging market economies during 1990s
- Global Financial Crisis 2008ff.; double-speed recovery
- Pro-cyclical behavior of global capital flows with destabilizing effects
- Even higher volatility in developing and emerging market countries (DEC)
- Debate on globalization and inequality
- Extended here to money and finance

Global currency composition

Currency distribution of global foreign exchange market turnover

Net-net basis, percentage shares of average daily turnover in April

Currency	1998	2001	2004	2007	2010	2013	2.016
	Share	Share	Share	Share	Share	Share	Share
US dollar	86,8	89,9	88,0	85,6	84,9	87,0	87,6
Euro	...	37,9	37,4	37,0	39,1	33,4	31,3
Yen	21,7	23,5	20,8	17,2	19,0	23,0	21,6
Sterling pound	11,0	13,0	16,5	14,9	12,9	11,8	12,8
Australian dollar	3,0	4,3	6,0	6,6	7,6	8,6	6,9
Canadian dollar	3,5	4,5	4,2	4,3	5,3	4,6	5,1
Swiss franc	7,1	6,0	6,0	6,8	6,3	5,2	4,8
Chinese yuan	0,0	0,0	0,1	0,5	0,9	2,2	4,0
Mexican peso	0,5	0,8	1,1	1,3	1,3	2,5	2,2
Swedish krona	0,3	2,5	2,2	2,7	2,2	1,8	2,2
NZ dollar	0,2	0,6	1,1	1,9	1,6	2,0	2,1
Singapore dollar	1,1	1,1	0,9	1,2	1,4	1,4	1,8
HK dollar	1,0	2,2	1,8	2,7	2,4	1,4	1,7
Norwegian krone	0,2	1,5	1,4	2,1	1,3	1,4	1,7
Korean won	0,2	0,8	1,1	1,2	1,5	1,2	1,6

Source: BIS, Foreign exchange and derivatives market activity 2016, in: Conti 2017

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Russian rouble	0,3	0,3	0,6	0,7	0,9	1,6	1,1
Indian rupee	0,1	0,2	0,3	0,7	1,0	1,0	1,1
South African rand	0,4	0,9	0,7	0,9	0,7	1,1	1,0
Brazilian real	0,2	0,5	0,3	0,4	0,7	1,1	1,0
Danish krone	0,3	1,2	0,9	0,8	0,6	0,8	0,8
Polish zloty	0,1	0,5	0,4	0,8	0,8	0,7	0,7
new Taiwan dollar	0,1	0,3	0,4	0,4	0,5	0,5	0,6
Malaysian ringgit	0,0	0,1	0,1	0,1	0,3	0,4	0,4
Thai baht	0,1	0,2	0,2	0,2	0,2	0,3	0,4
Hungarian forint	0,0	0,0	0,2	0,3	0,4	0,4	0,3
Czech koruna	0,3	0,2	0,2	0,2	0,2	0,4	0,3
Chilean peso	0,1	0,2	0,1	0,1	0,2	0,3	0,2
other currencies	0,2	6,9	6,9	8,2	5,4	2,5	3,3
Total	200,0	200,0	200,0	200,0	200,0	200,0	200,0

Source: BIS, Foreign exchange and derivatives market activity 2016

Global currency composition

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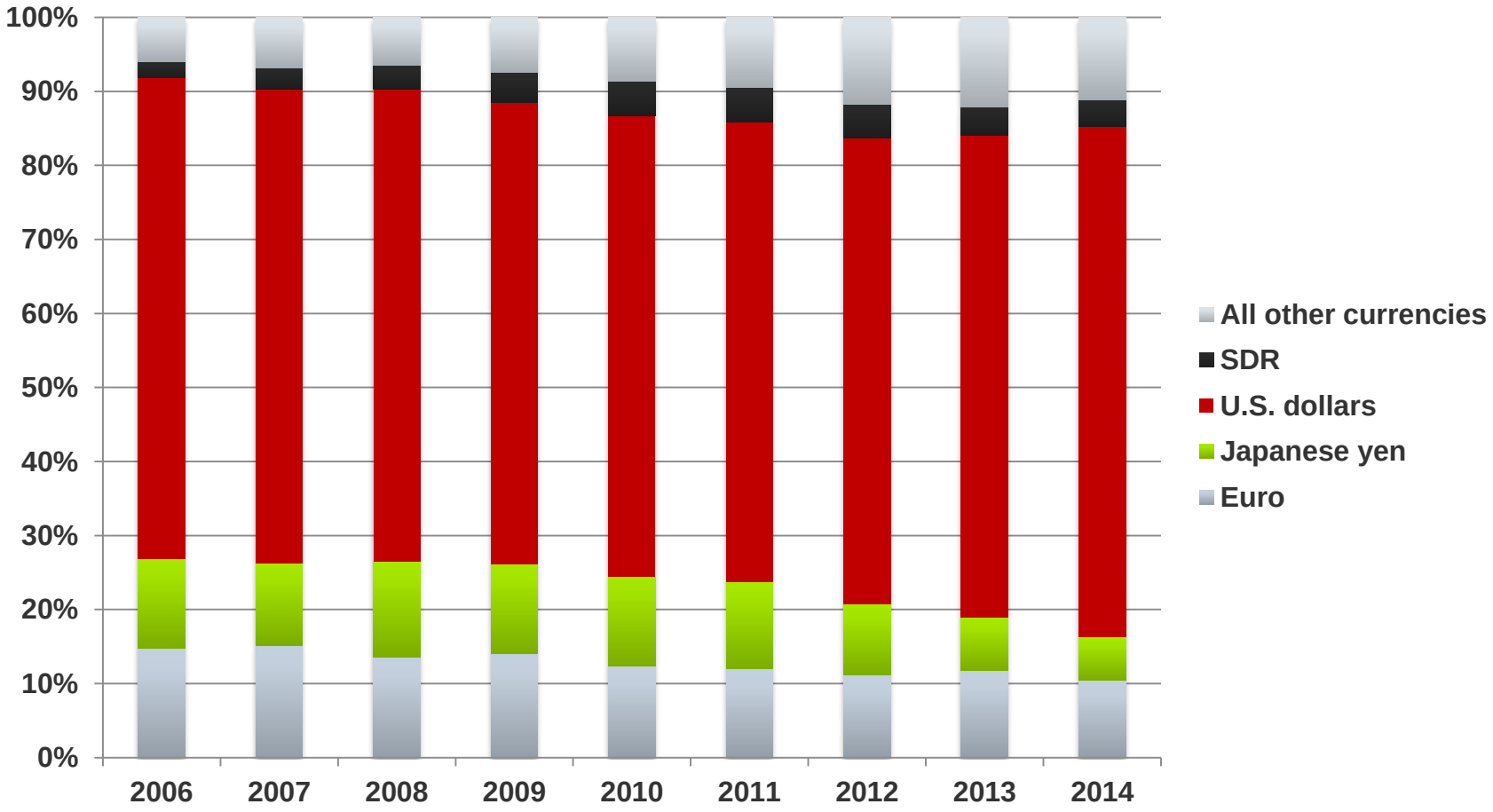
Currency composition of external debt
All Developing countries (in %)



Source: World Development Indicators, World Bank, in: Conti 2017

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Structure

1. Literature survey
2. Currency hierarchy (CH):
   a. Liquidity premium and currencies
   b. The concept
   c. Structural feature with variance over time
   d. Currency hierarchy in balance sheets
3. Limits for economic policies at CH bottom
   a. Monetary policy
   b. Exchange rate policy
4. Challenges to climb the ladder
5. Conclusion

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Keynes at the periphery: Currency hierarchy and challenges for economic policy in emerging economies

Luiz Fernando de Paula, Barbara Fritz & Daniela M. Prates

2. Currency Hierarchy (CH)

1. Literature survey

‘Original sin’ (Eichengreen/Hausmann 2005):

- inability to borrow abroad; empirical approach
- size of currency instead of policy variables; historical dimension

Geography of Money’ (Cohen 1998; 2004):

- spacial dimension of currencies; ‘monetary pyramid’; power relations
- Exorbitant priviledge of hegemonic currency

Keynes:

- International monetary system based on a key-currency is hierarchical
- Keynes Plan (1948) to balance global hierarchies

1. Literature survey

Within development economics:

‘Centre and Periphery’ (CEPAL):

- asymmetric global economic relations
- trade flows (Prebisch 1950); financial flows (Ocampo 2003, 2013)

Structuralist literature from Latin America

- debt crises and inflation with link to global asymmetries
- Belluzzo 1999; Carneiro 2006; Frenkel 2006

‘Monetary Keynesians’

- exchange rate undervaluation as development strategy
- Herr 1992; Riese 2004; Schelkle 1995; Nitsch 1999

2.
Currency Hierarchy (CH)

a. Liquidity premium

In monetary economy, different assets have specific attributes (Keynes 1936):

- expected appreciation *a*
- expected quasi-rent *q*
- carrying cost *c*
- liquidity premium *l* (non-pecuniary return, linked to uncertainty)

Combination of these attributes yields an asset's total return (r_a):

$$r_a = a + q - c + l \qquad (1)$$

Assets denominated in different currencies with peculiar pricing:

- *a* as expected exchange rate, not determined by fundamentals (Davidson 1982; Harvey 2009)
- *q* as interest rate
- *c* as degree of financial openness
- *l* as structural variable; only to be influenced over longer term

b. The concept

- Equilibrium at foreign exchange market

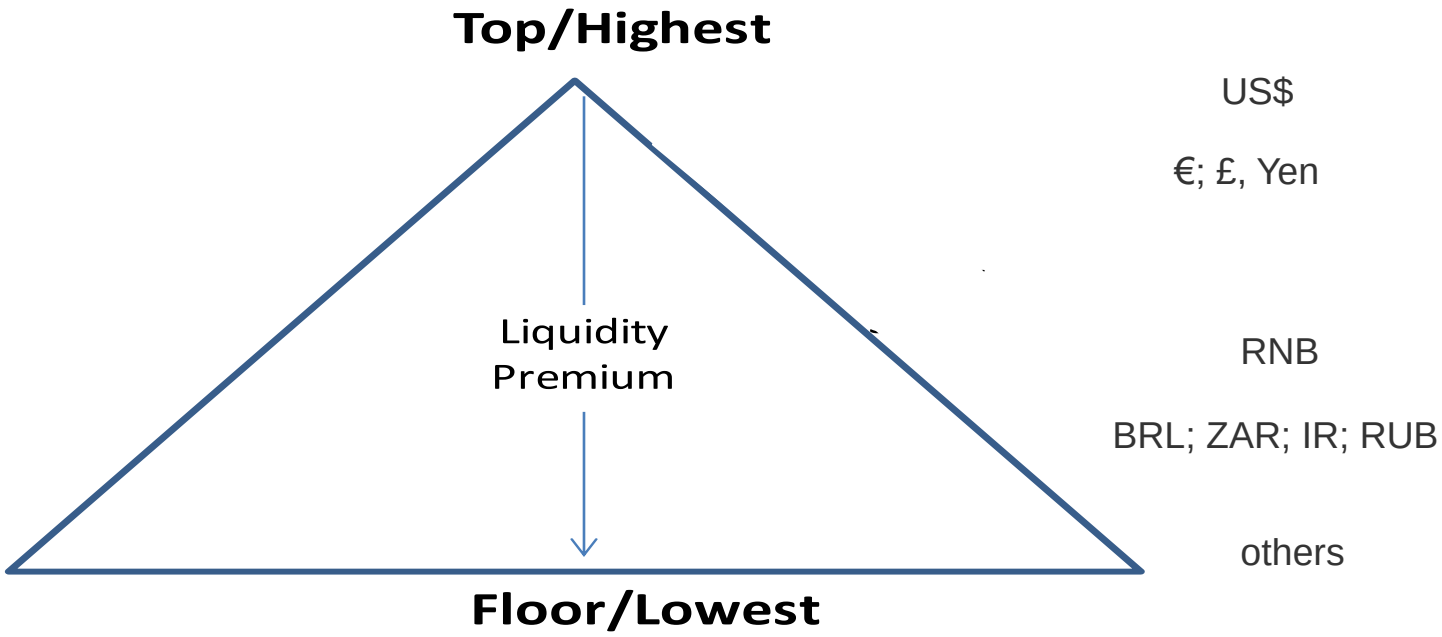
$$a_n + q_n - c_n + l_n = a_s + q_s - c_s + l_s \qquad (2)$$

- Structural asymmetry based on investors' preference for few currencies
  - Hegemonic currency or key currencies ("north")
  - At the bottom, currencies issued by DEC ("south")

- Currency hierarchy: $l_s < l_n$
- To be compensated by $(a_s + q_c - c_s) > (a_n + q_n - c_n)$
  (Paula et al. 2017; Fritz et al. 2018)

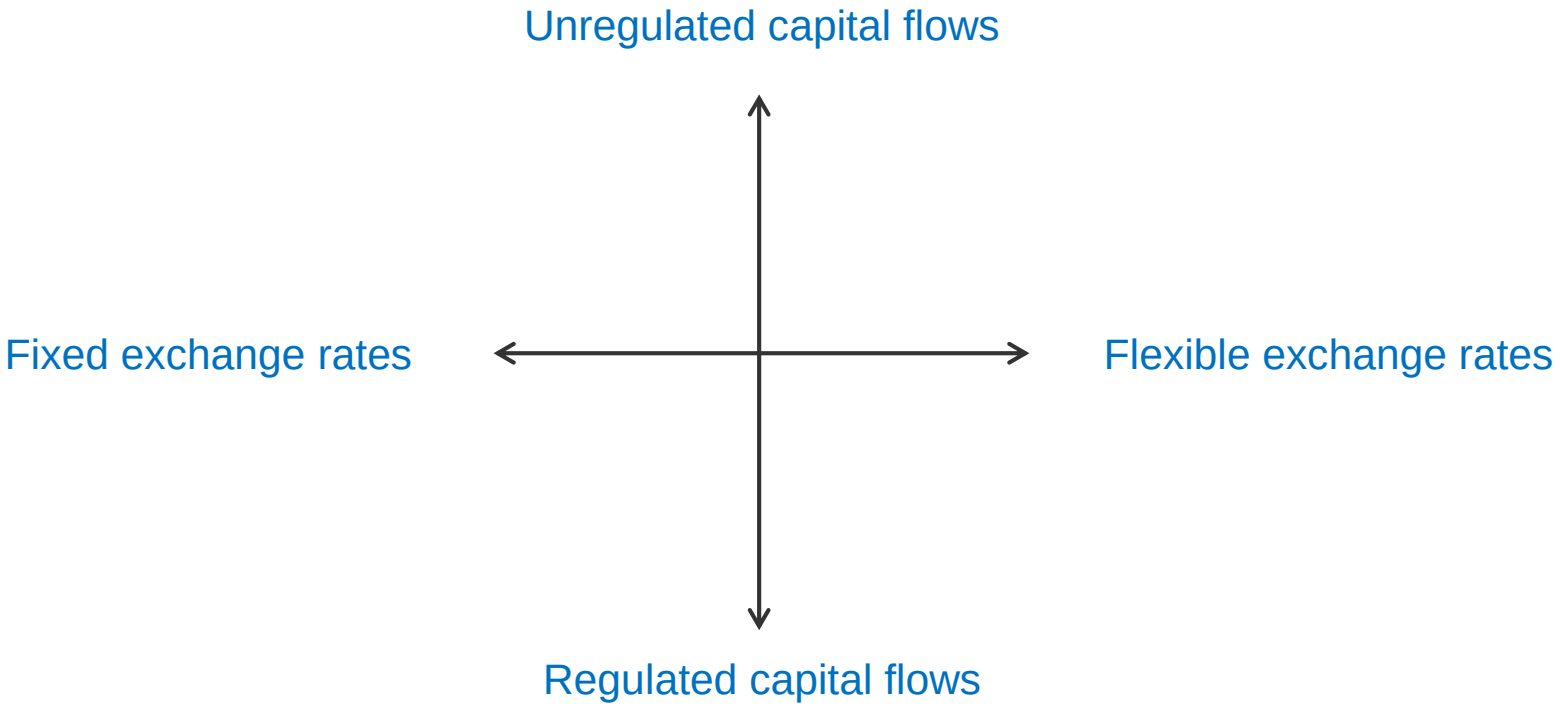
International monetary system as hierarchical and asymmetric system

Currency hierarchy



c. Structural feature with variance over time

Global monetary regimes



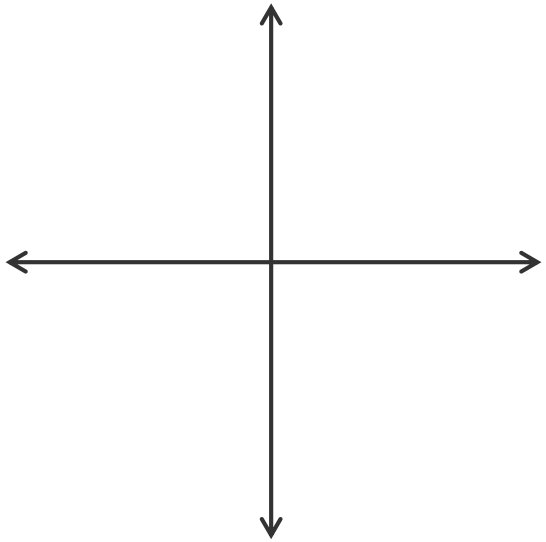
Global monetary regimes

stable

unstable

Unregulated capital flows

Fixed exchange rates



Flexible exchange rates

Regulated capital flows

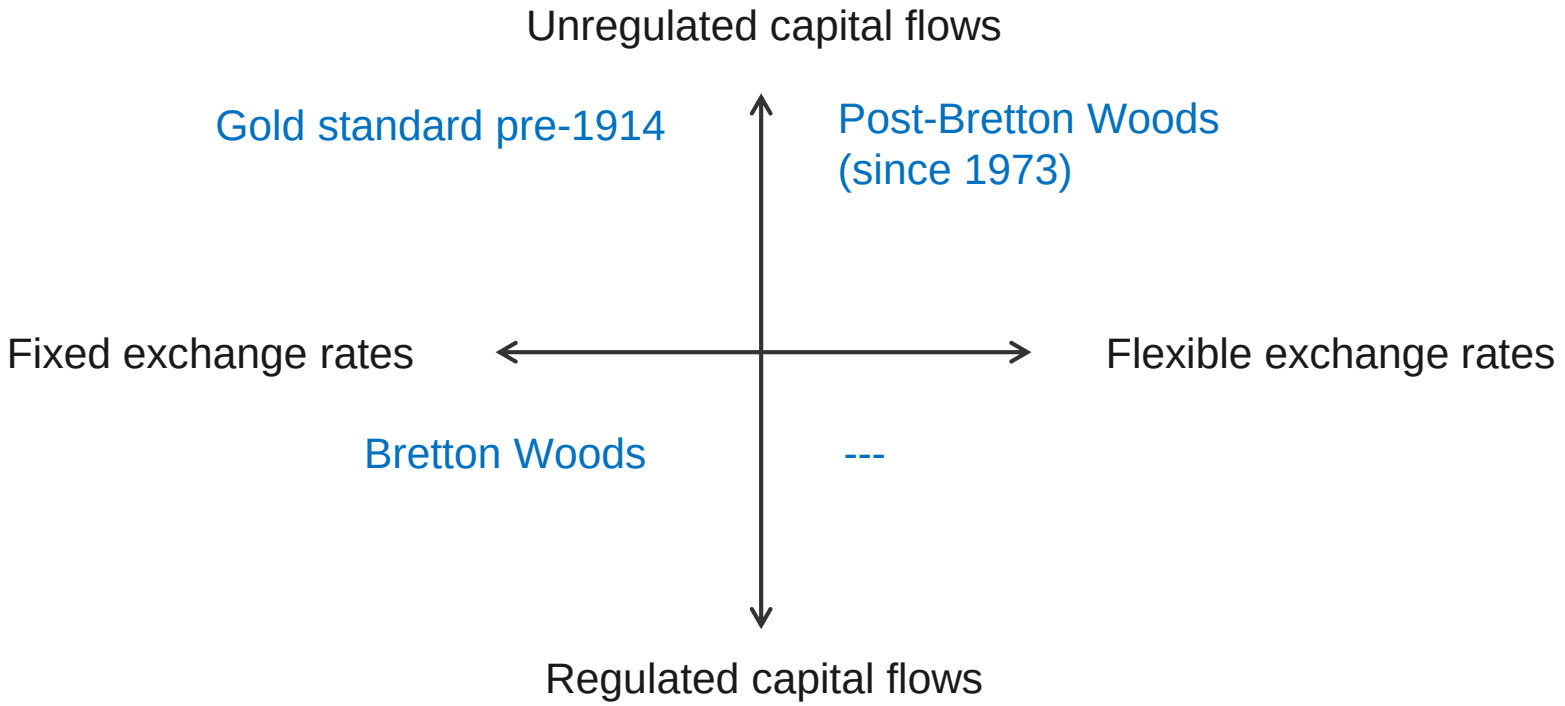
Super stable

stable

Global monetary regimes

stable

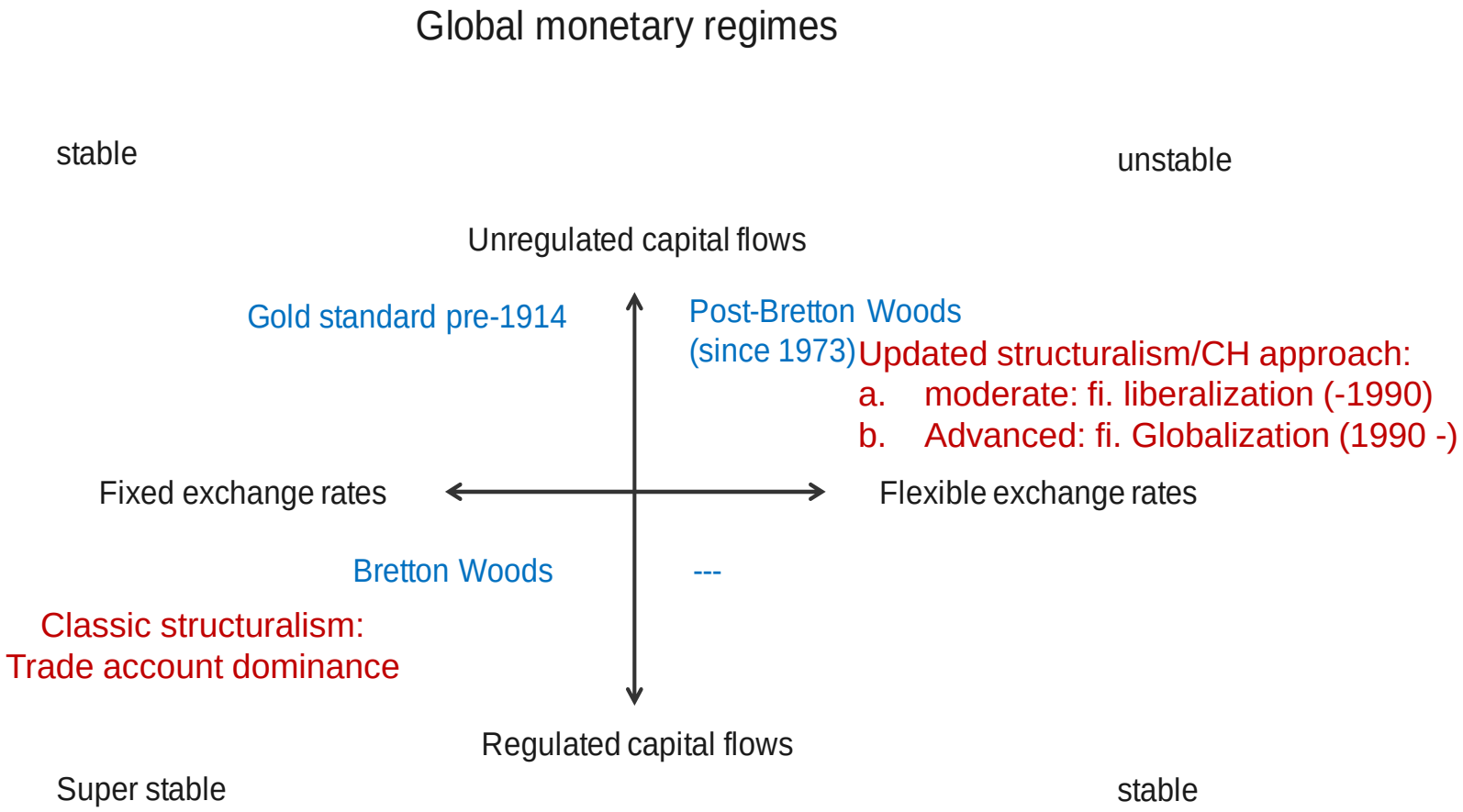
unstable



Super stable

stable

Currency hierarchy as updated structuralism



Source: Fritz, Paula & Prates (2018)

Global monetary regimes

stable

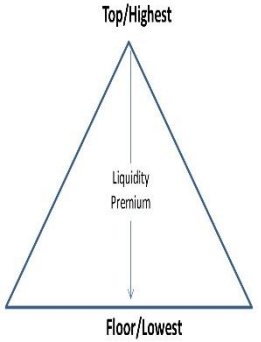
unstable

Unregulated capital flows

Goldstandard

Post-Bretton Woods

Currency hierarchy



Fixed exchange rates

Flexible exchange rates

Bretton Woods

Currency hierarchy

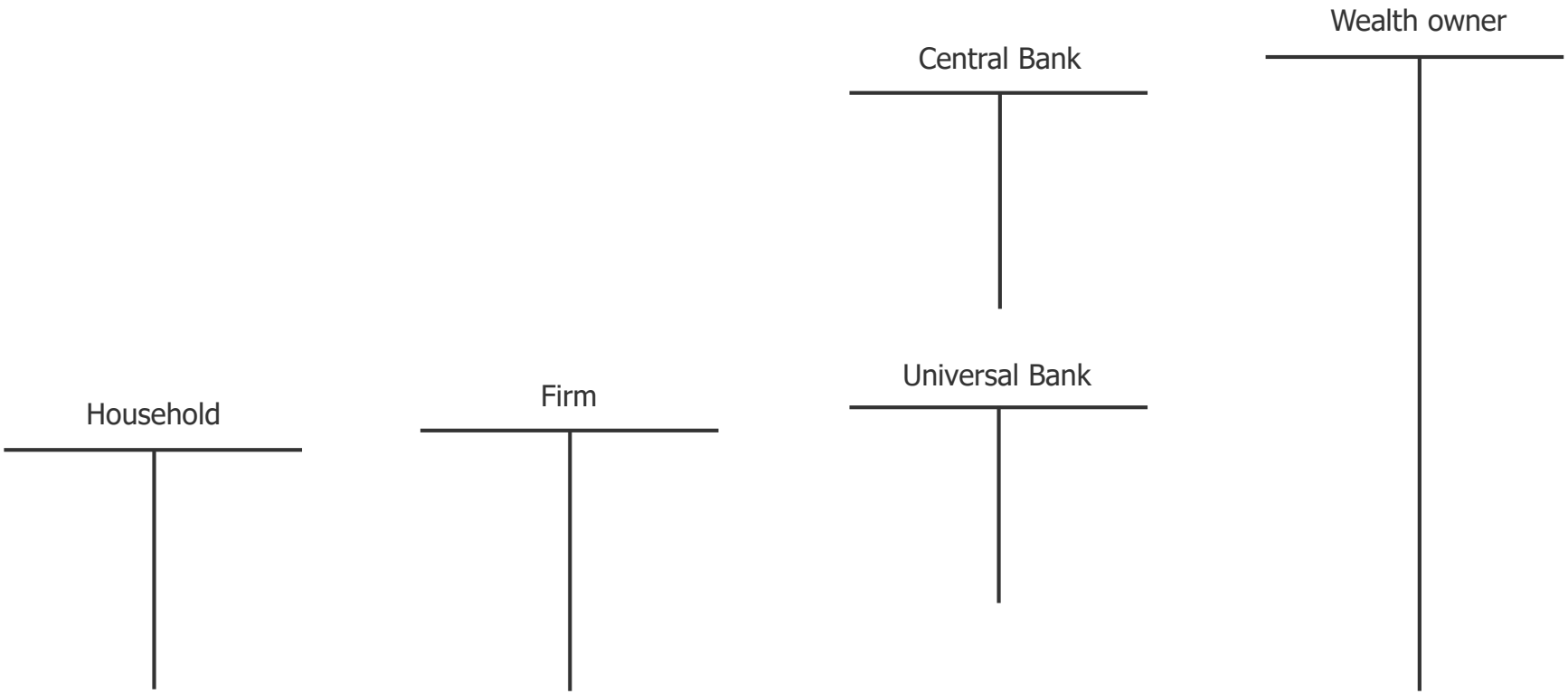
Regulated capital flows

super stable

stable

d. CH in balance sheets

1. Closed Economy



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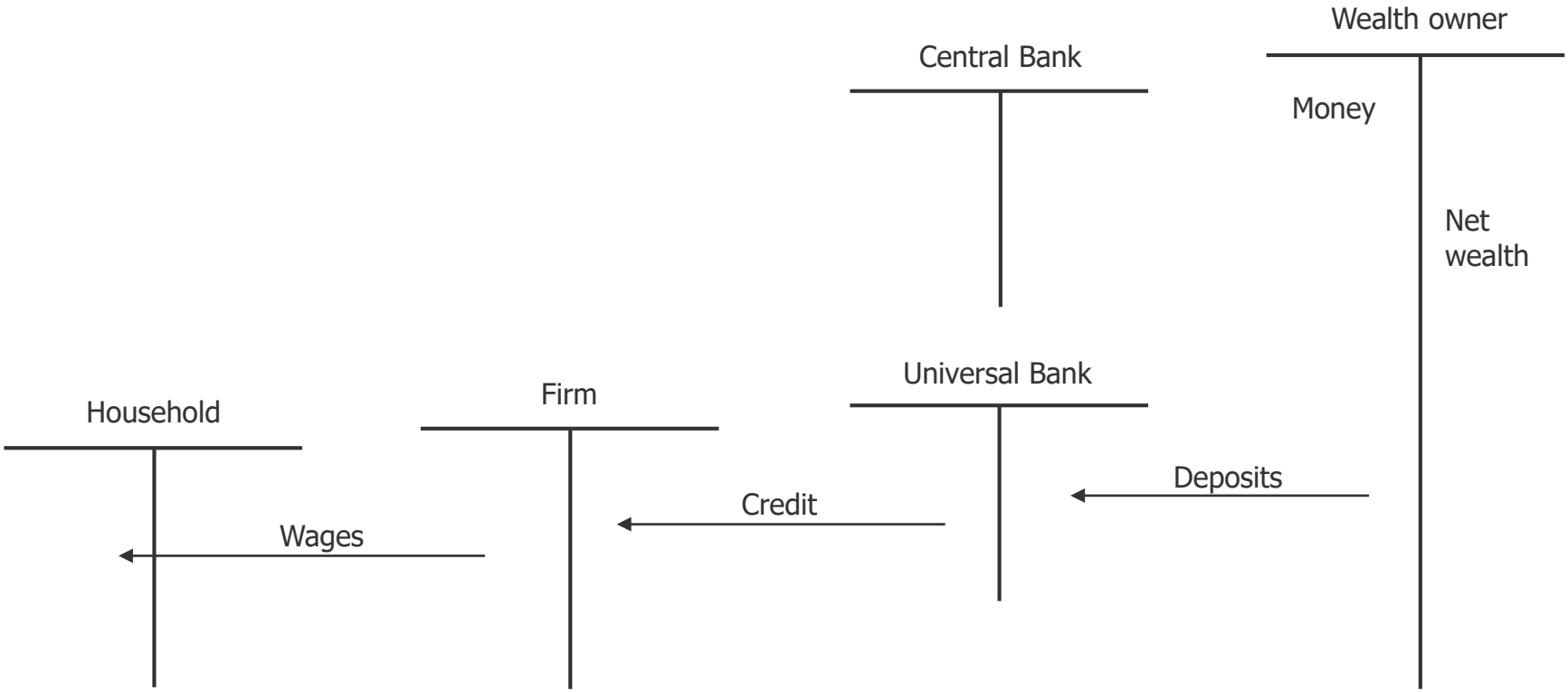

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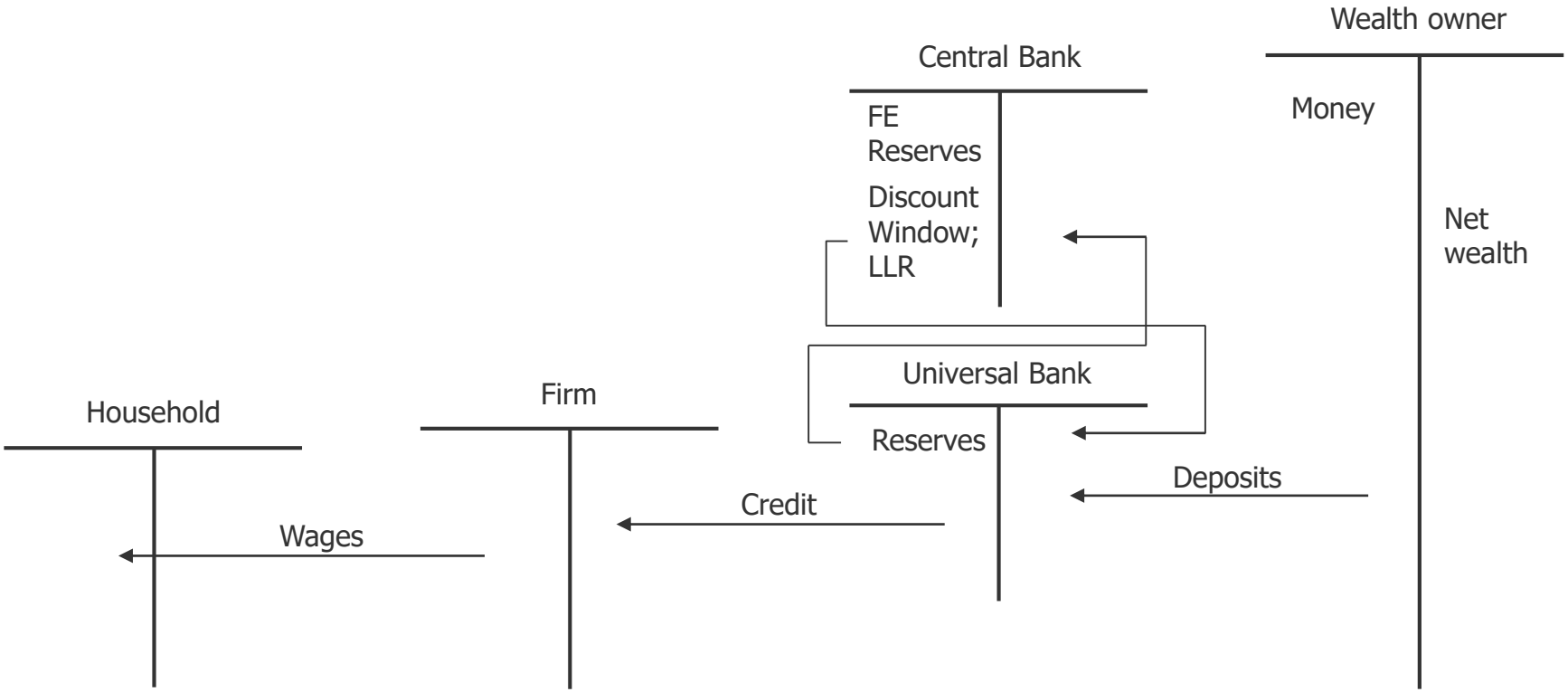
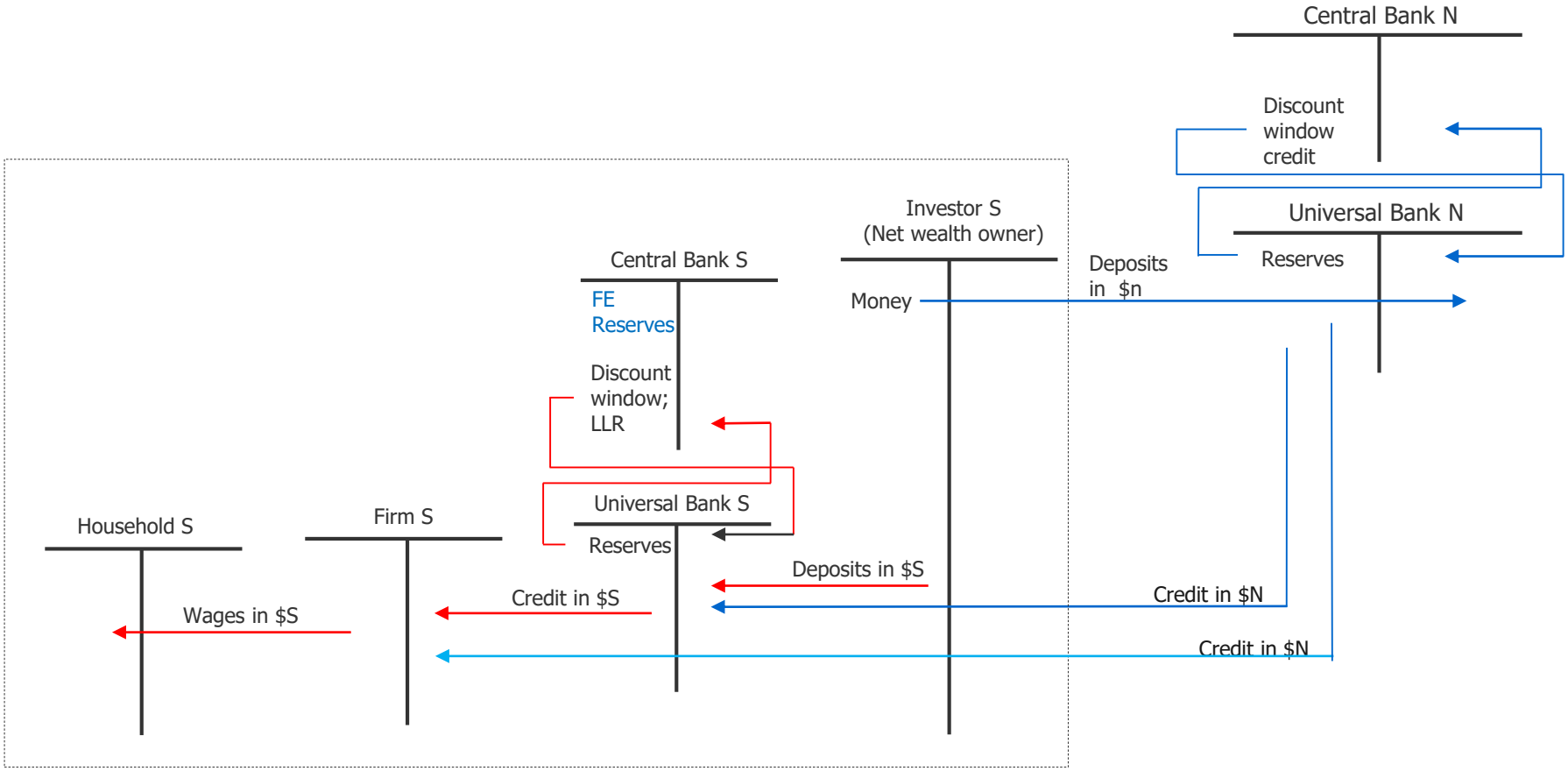


CH in balance sheets

2. Open economy of southern currency

a. Under global regime of financial internationalization



Source: own compilation, loosely based on Bindseil (2004), Nitsch (1995)
Notes: LLR = Lender of Last resort
Red: onshore transactions; blue: cross-border transactions

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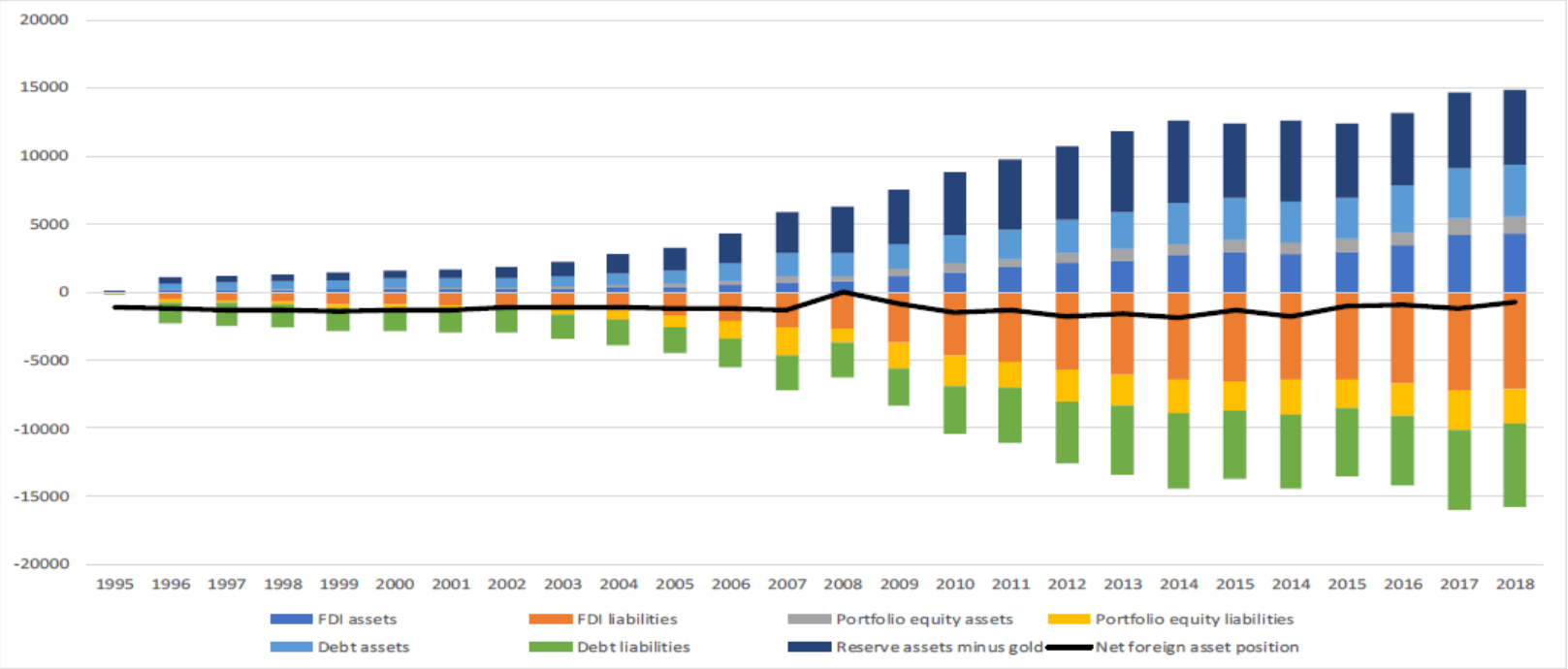
b. Under global regime of financial globalization

Financial globalization (Chesnais):

- more agents
- financial contracts in all currencies, cross-border and onshore
- Magnitude and composition of cross-border capital flows
- EMEs: FE reserves increased, net debt reduced / net creditors

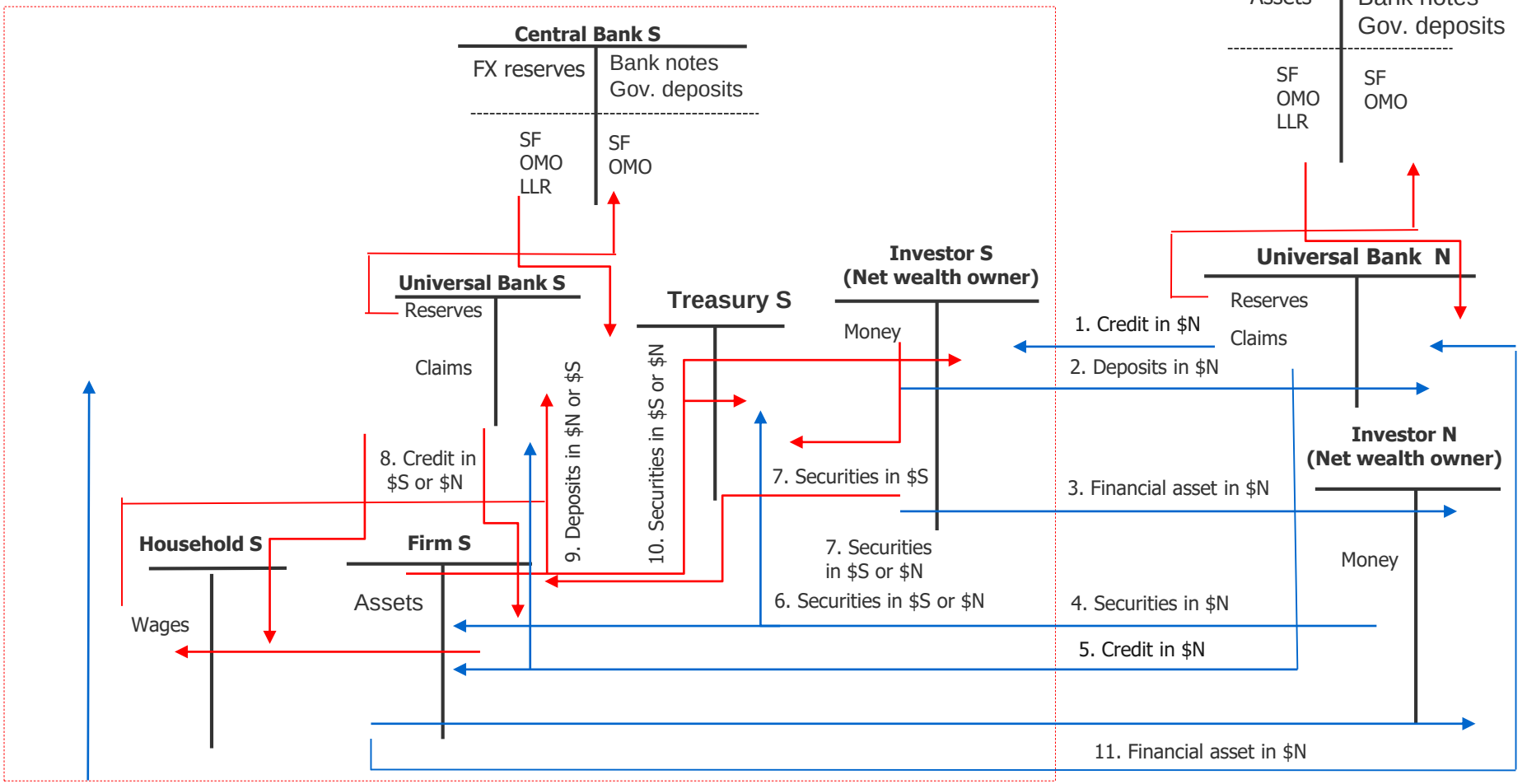
Figure 1: Stocks of gross external assets and liabilities, group of selected developing countries, 1995–2018, $ billion



Source: Mayer 2019, based on Lane and Milesi-Ferretti (2018) and IMF IIP database

CH in balance sheets

2. Completely open economy of southern currency
b. Under global regime of financial globalization

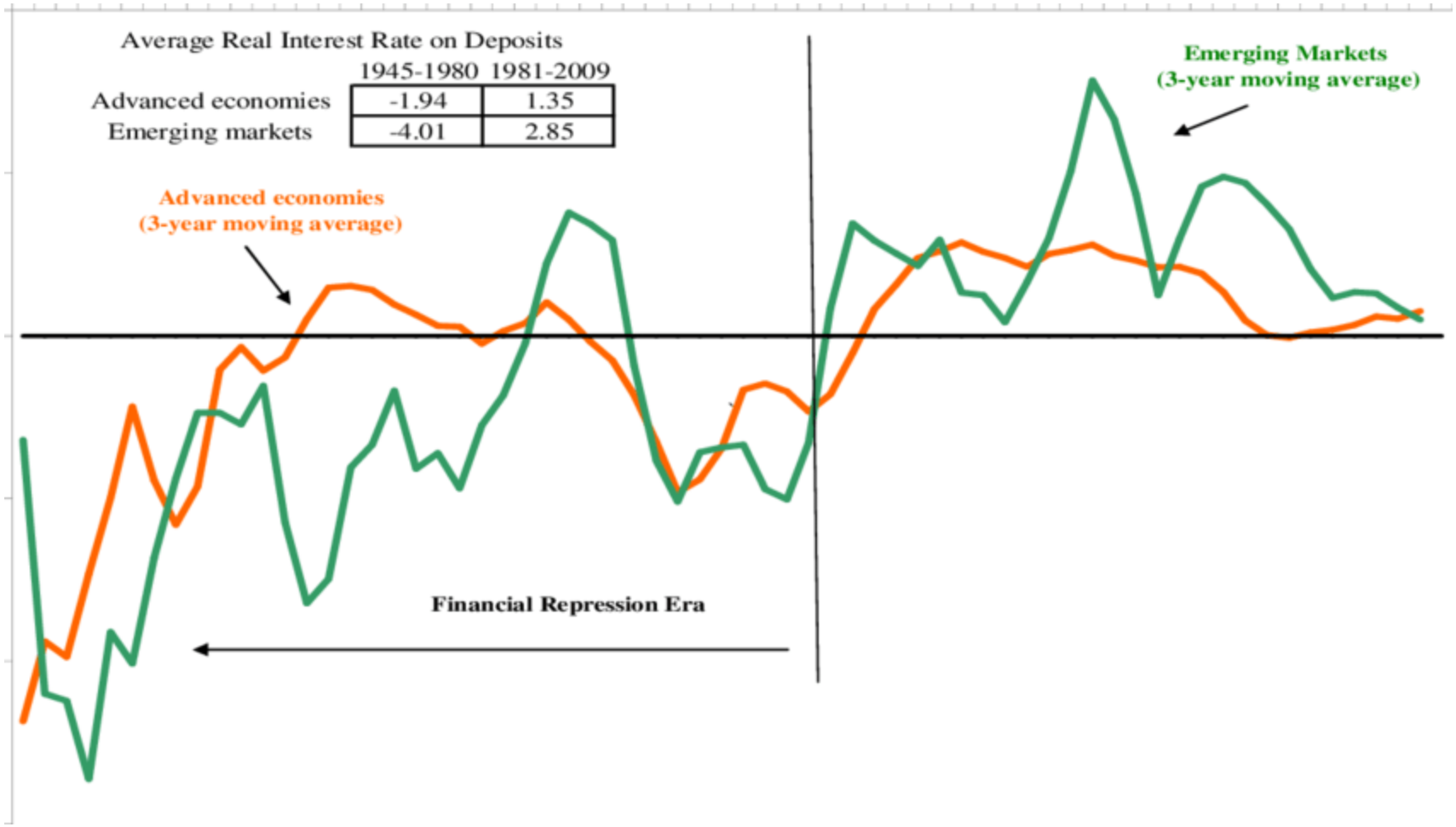


Source: own compilation, loosely based on Bindseil (2004), Nitsch (1995)
Notes: SF = Standing Facilities; OMO = Open Market Operations; LLR = Lender of Last resort
Red: onshore transactions; blue: cross-border transactions

3.
Limits for economic policies at the bottom

a. Monetary policy

- Currency hierarchy requires compensation of the difference between the liquidity premium of currencies
- $q_s > q_n$ to compensate $l_s < l_n$
- Lower growth; non-convergence of GDP per cap.
- lower financial development
  = reduced space for active monetary policy



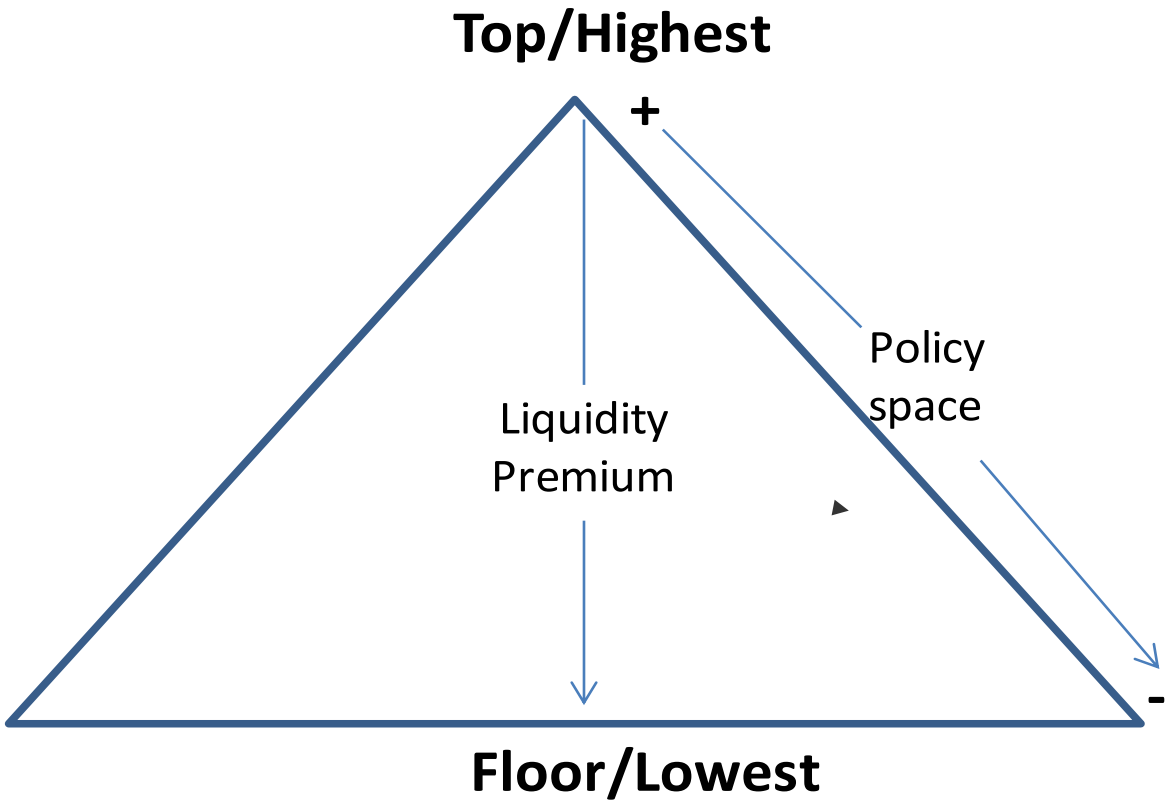
Source: Reinhart/Sbrancia (2011)

b. Exchange rate policy

Relevance of capital inflows → exposure to boom bust-cycles

- Boom: $q_s > q_n$ → DEC currencies objects of desire of global investors
  - *a* increases (cet. par.)
  - build-up of risks in capital account and financial sector
- Bust: DEC currencies first sold due to $I_s > I_n$ plus expectation of *a* reduction
  - pressure to raise interest rate (increasing q and a) and to deepen financial openness (reduce c)
  - when not successful: currency crisis
- Result: higher volatility of *a* (Obstfeld/Taylor 2004; Calvo/Reinhard 2002)
- 'Impossible duality' with open capital account (Flaßbeck 2002; Rey 2013) more accentuated for DEC

Currency hierarchy



4.
Challenges to climb the ladder

- Relevance to reduce volatility of *a*
  - Reduces pressure on *q* and *c*
  - Current account surplus to achieve net FE income, substituting other capital inflows
  - Relevance of widened capital account regulation (IMF 2012; Gallagher et al. 2012; Williamson 2004) and strict limits for onshore FE financial transactions
  - Financial development by institution building (Paula et al. 2017)
- Central bank with double target: inflation and exchange rate stabilization
  - Inflation targeting inadequate (Eichengreen et al. 2011)
- Policy coordination: exchange rate and monetary stability supported by
  - Balanced fiscal policy
  - Moderate wage policy

  → Limited space for redistributive policies

5. Conclusion

- Currency hierarchy as structural feature of international monetary and financial system
  - Beyond methodological nationalism: relational concept of growth and development
  - CH as relevant driver for global economic inequality
  - Different degrees of policy space

- To climb the ladder: challenging strategy
  - Priority for stable and competitive exchange rate
  - Depends on specific external vulnerabilities, institutions and policy sets
  - Requires strict limitation of financial globalization at domestic level
  - Relative changes of position not at short-term

- No universal strategy for all:
  - Relevance of current account surplus
  - Not all countries can climb up at the ladder at the same time

- Fertile field for research:
  - monetary theory; historical analysis; empirical studies; policy analysis …

Financial development at top and bottom of CH: Ideal type of a central bank balance sheet

(Bindseil 2004)

Table 2.1 *An ideal central bank balance sheet format*

Autonomous factors	
Foreign currency incl. gold	Banknotes in circulation
Investment assets	Government deposits
Other assets	Capital and reserves
	Other liabilities
Monetary policy operations	
OMO I (e.g. reverse operations)	Liquidity-absorbing OMO I (e.g. reverse operations)
OMO II (e.g. outright holdings of securities)	Liquidity-absorbing OMO II (e.g. issuing debt certificates)
Liquidity-injecting standing facility	Liquidity-absorbing standing facility
	Reserves of banks (including those to fulfil required reserves)

Note: OMO: open market operations.

United States

(Bindseil 2004)

Table 2.7 *US Fed: Factors affecting reserves, Wednesday 20 December 2000, in billions of US dollars*

Gold and other foreign assets	13	Currency in circulation	587
Float	4	Government deposits	5
Other assets	66	Required clearing balances	7
		Capital, other liabilities	18
US government paper bought outright	515		
Repurchase agreement	26		
Discount window	0		
		Reserves of banks	7
TOTAL	624	TOTAL	624

Source: Board of Governors' website.

Ghana

(Bindseil 2004)

Table 2.9 *Bank of Ghana financial statement, end December 2000, in billions of Cedis*

Claims on government	3,169	Notes in circulation	1,857
Other assets (net)	625	Net foreign liabilities	1,154
		Capital accounts	511
Claims on banks	15		
		Deposits of banks	287
TOTAL	3,809	TOTAL	3,809

Source: Quarterly Bulletin of the Bank of Ghana.