

# Currency hierarchy and policy space: A framework for development economics

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#### Starting point, question and findings

#### Keynesian literature (i.e. Arestis/Sawyer 1998; 2006):

- Monetary stability insufficient for growth and employment
- Concept for growth-oriented policies: State active role in policy coordination
- General assumptions
- Or applied to centre economies

Question: How applicable to developing and emerging countries (DEC)?

#### Arguments:

- Currency hierarchy imposes major constraints to policy space in DEC
- Policy space for development simultaneously determinable by domestic variables



Journal of Post Keynesian Economics

Point of departure: Paula/Fritz/Prates (2017)

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



#### **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 of policy space at the CH bottom
  - a. Monetary policy
  - b. Exchange rate policy
- Challenges to climb the ladder
- 5. Conclusion



#### 1. Literature survey

#### Keynes:

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

#### 'Centre and Periphery' (ECLAC / CEPAL):

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

#### 'Geography of Money' (Cohen 1998; 2004):

- spacial dimension of currencies; 'monetary pyramid'
- hegemonic currency with 'exorbitant privilege'

#### 'Original sin' (Eichengreen/Hausmann 2005):

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



### 2. Currency Hierarchy (CH)



#### a. Liquidity premium

In monetary economy, different assets have specific attributes (Keynes GT, ch. 17):

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

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

$$r_a = a + q - c + I$$
 (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
- I as structural variable; only to be influenced over longer term



#### b. The concept

#### Combining strands of literature

- a. Structuralist/post-Keynesian literature from Latin America (i.e. Belluzzo 1999; Carneiro 2006; Frenkel 2006)
- b. Keynes and 'Monetary Keynesians' (i.e. Herr 1992; Riese 2004; Schelkle 1995; Nitsch 1999)
- c. Recent post-Keynesian literature (Kaltenbrunner 2017; Minsky 1986; Paula et al 2017; Prates/Andrade 2013)



#### b. The concept

Equilibrium at foreign exchange market

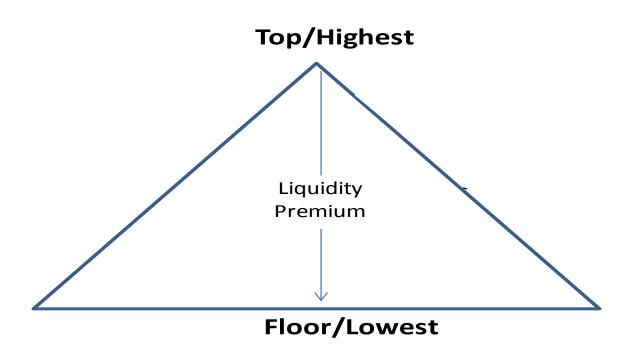
$$a_n + q_n - c_n + I_n = a_s + q_s - c_s + I_s$$
 (2)

- 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: I<sub>s</sub> < I<sub>n</sub>
- To be compensated by  $(a_s + q_c c_s) > (a_n + q_n c_n)$ (Paula et al. 2017)



### International monetary system as hierarchical and asymmetric system

#### **Currency hierarchy**

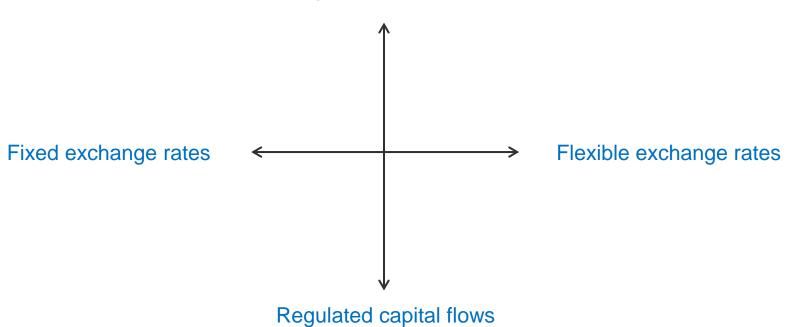




#### c. Structural feature with variance over time

#### Global monetary regimes

#### Unregulated capital flows



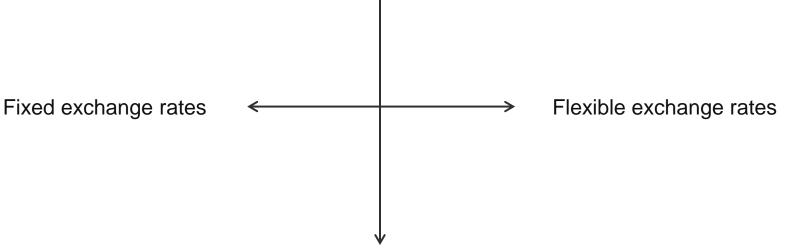
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#### Global monetary regimes

stable unstable

Unregulated capital flows



Super stable stable

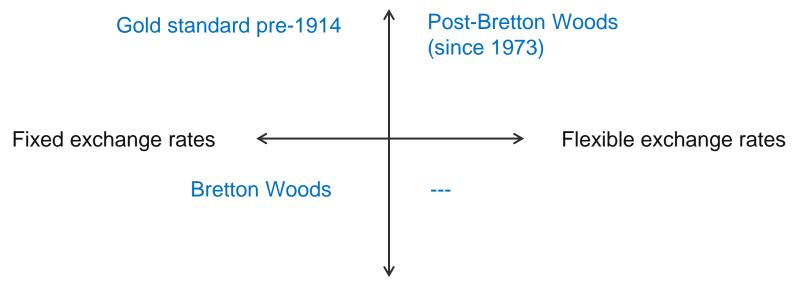
Regulated capital flows



#### Global monetary regimes

stable unstable

#### Unregulated capital flows



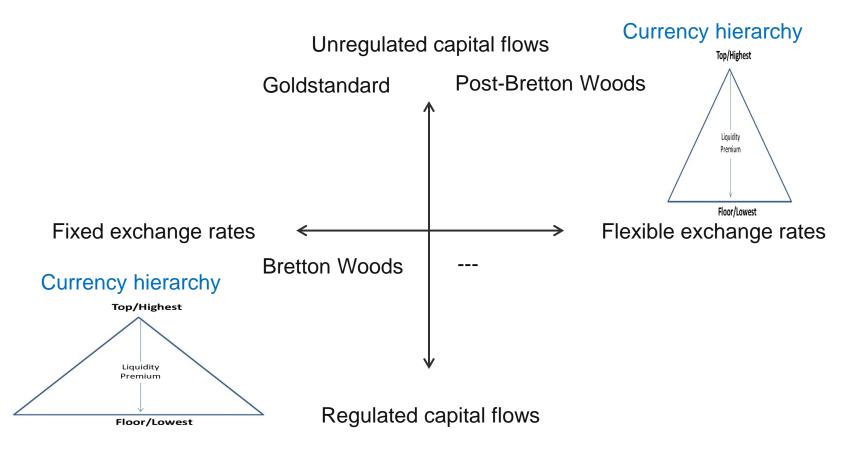
Regulated capital flows

Super stable stable



#### Global monetary regimes

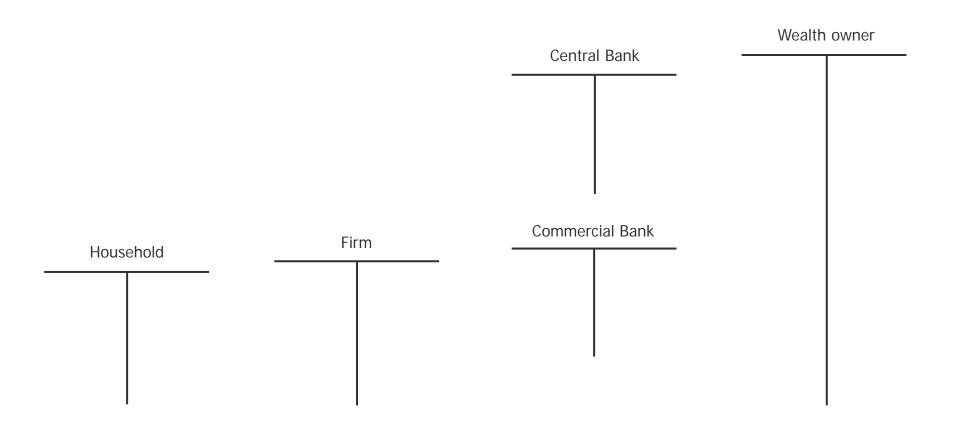
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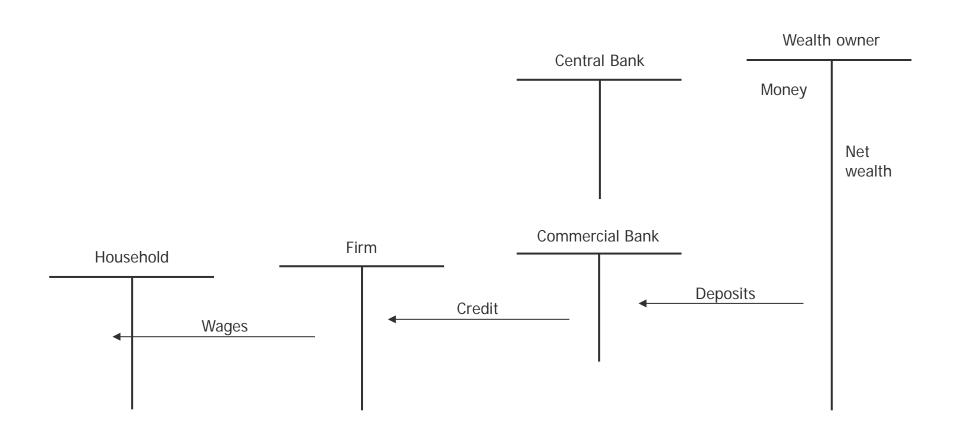


#### 1. Closed Economy



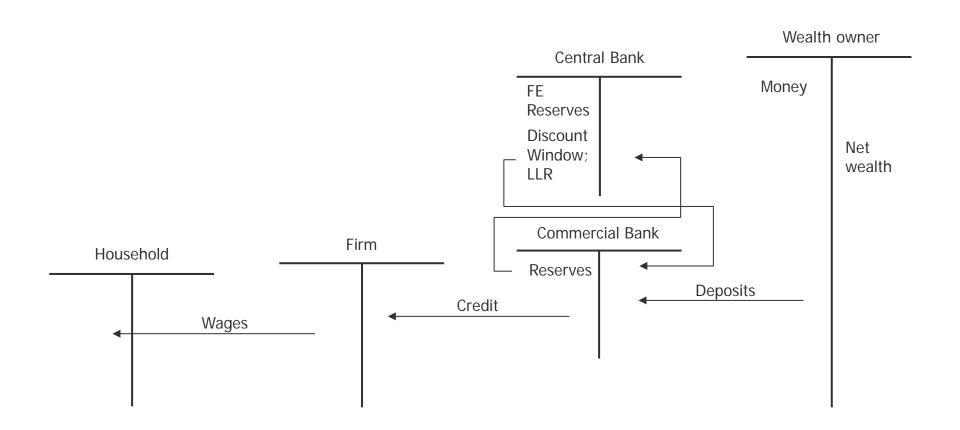


#### 1. Closed Economy



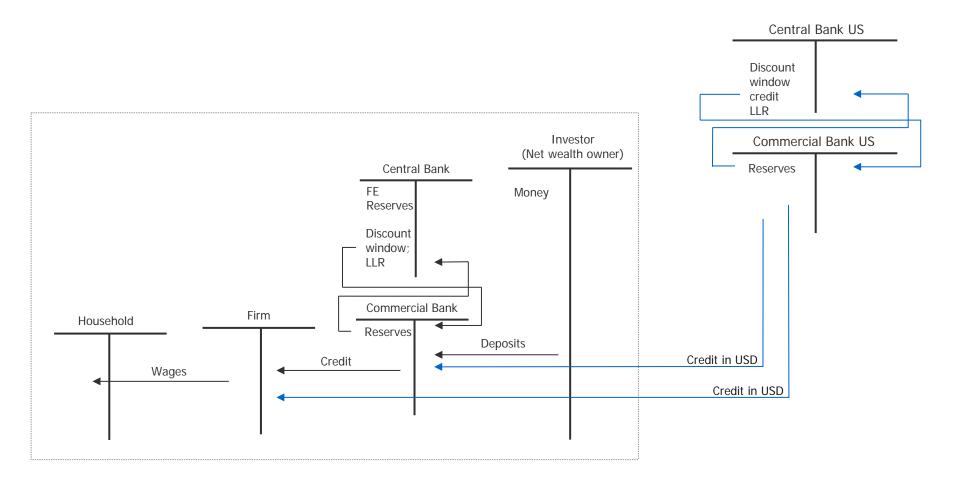


#### 1. Closed Economy



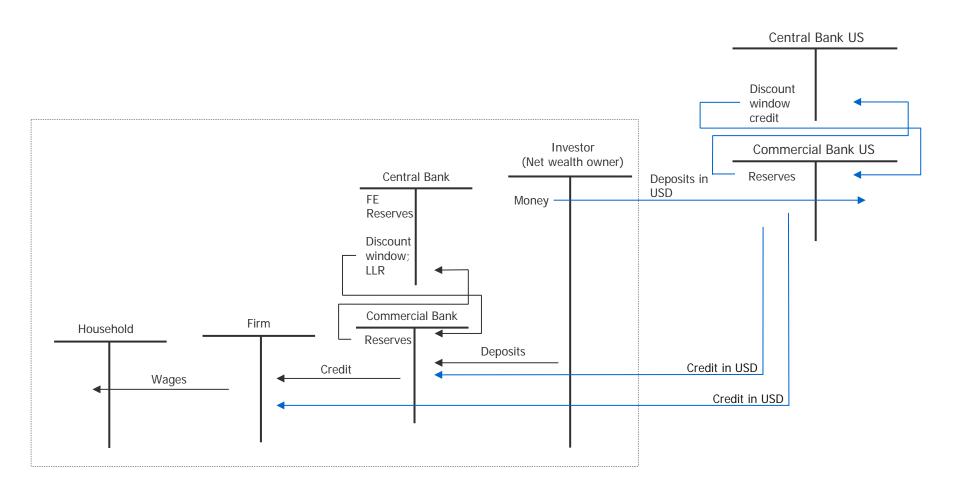


2. Open economy of southern currency



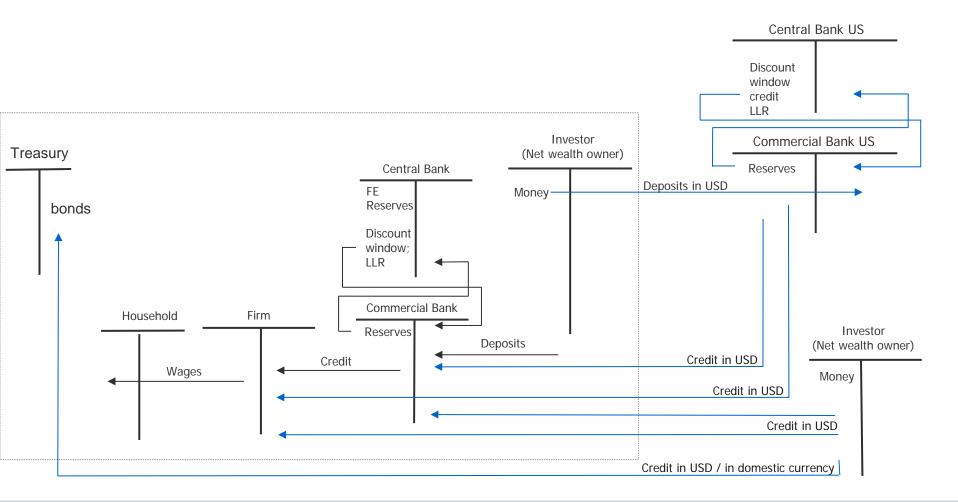


2. Open economy of southern currency





2. Open economy of southern currency





## 3. Limits of policy space 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  $I_s < I_n$
- Lower growth; non-convergence
- lower financial development
  - = reduced space for active monetary policy



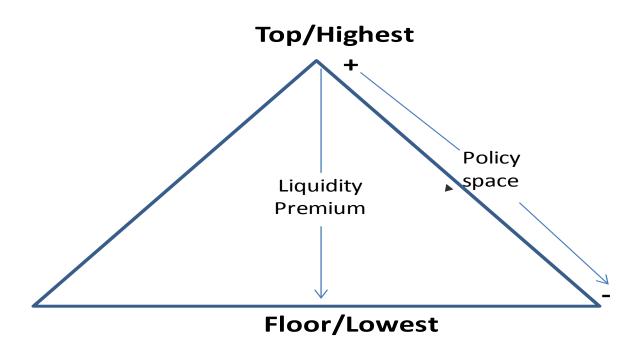
#### b. Exchange rate policy

Relevance of capital inflows  $\rightarrow$  exposure to boom bust-cycles

- Boom: q<sub>s</sub> > q<sub>n</sub> → 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<sub>s</sub> > I<sub>n</sub> and 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)
- Result: '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
  - Relevance of capital account regulation (IMF 2012; Gallagher et al. 2012; Williamson 2004)
  - Financial development (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 the international monetary and financial system
  - Global economic inequality due to growth differences
  - Different degrees of policy space
  - Relative changes of position within hierarchy not at short-term
- To climb the ladder: challenging strategy
  - Priority for stable and competitive exchange rate
  - Challenge for policy coordination and redistributive policies
  - Depends on specific external vulnerabilities, institutions and policy sets
- No universal strategy for all:
  - Relevance of current account surplus
  - Not all countries can climb up at the ladder at the same time



Thank you for the attention!

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### 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		
Mone	tary 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.