# Stabilizing the Unstable Small Open Economy

- This work summarizes several ideas included in my forthcoming book: **Money, Banking and the Foreign Exchange Market in Emerging Economies**.
- **Methodology**: builds up a theoretical framework by first observing **economic structure**.
- **Assumptions**: (i) financial institutions dominate financial markets; (ii) financial prices indicate oligopolistic mark-up prices; (iii) liquidity preference of commercial banks.

- Small Open Economies (SOEs) operate in a global financial straightjacket.
- Central bank must **hoard** a certain level of **foreign exchange reserves**.
- FX reserves are required for stability and credibility.
- Central bank buys FX reserves from domestic economic agents – banks and exporters.

- Central bank pays for FX reserves using local currency units or credits banks with **excess reserves**.
- When the central bank buys FX reserves it engenders a **foreign currency constraint** (FCC).
- The FCC is defined similarly to Khemraj (2009) and Khemraj and Langrin (2011). It implies a mismatch between the demand and supply of hard currencies.
- The FCC should be **distinguished** from the structuralist notion of **foreign exchange gap**.
- FCC is a short-term phenomenon while the FX gap is a long-term problem pertaining to economic growth.
- Therefore,

**Central bank FX hoarding** $\Rightarrow$ **FCC** $\Rightarrow$ **Excess Reserves**

- FCC implies commercial banks/economic agents cannot invest in foreign assets as they would like.

## THE COMPENSATION THESIS

- Banks can use excess reserves to bid up nominal exchange rate.
- This results in depreciation and potentially inflation pass-through.
- **What should the central bank do?**
- **Compensation**
- The central bank has to **compensate** the commercial banks by selling them T-Bills or some other security that bears a rate of interest.
- Excess reserves typically earn 0% interest.
- **Compensation** is different from **open market operations**.
- Literature on **Compensation**: Khemraj (2009) and Lavoie and Wang (2012)

## MODEL OF COMPENSATION

See **Figure 3** from my paper.

- Compensation is endogenous (Lavoie and Wang 2012)
- Sterilization is exogenous

## EXCESS RESERVES AND PORTFOLIO VOLATILITY

- Excess reserves can reduce the volatility associated a portfolio of assets banks demand

**See page 10 of my paper for equation**:

- Oligopoly mark-up increases the volatility. Therefore, **endogenous compensation** can help to dampen the volatility.

## THE STABILIZATION PROBLEM

- A **trade-off** between compensation and volatility.
- Increase compensation implies higher volatility.
- The stabilization problem will involve the optimal level of compensation and volatility.

## TRANSMISSION MECHANISM

- This work implies that we have to reinterpret the monetary transmission mechanism.
- The **bank lending channel** is weak and virtually non-existent in small open developing economies (Khemraj 2007, Mishra and Montiel 2013).
- We need to examine how shocks to FCC and central bank hoarding ripple through the economy.
- Langrin and Khemraj (2011) started down this road.

# Thank You