The RMB: China’s Exchange Rate Policy

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Two big problems of global financial flows over the last 3 decades:

- Cycle in capital flows to emerging markets.
- Unsustainable negative trend in US current account.
- Recently, these two big problems have merged.
Cycle in capital flows to emerging markets

Cycle prophesied by Joseph in Egypt:

7 fat years followed by 7 lean years.
Cycle in capital flows to emerging markets

- 1st developing country lending boom ("recycling petro dollars"): 1975-1981
  - Ended in international debt crisis 1982
  - Lean years ("Lost Decade"): 1982-1989

- 2nd lending boom ("emerging markets"): 1990-96
  - Ended in East Asia crisis 1997
  - Lean years: 1997-2003

- 3rd boom (incl. China & India this time): 2003-2009
Managing capital inflows. 1990s: Trade Deficits. This decade: Δ Reserves.
The latest emerging market boom began in 2003.

**Figure 1.15. Private Capital Flows to Emerging Markets**
*(Billions of U.S. dollars)*

Gross private flows to emerging markets have risen rapidly in recent years, while net flows have been sustained at historically high levels. Although foreign direct investment has risen, portfolio flows and other investment flows have risen more steeply, especially to emerging Asia, emerging Europe, and the Commonwealth of Independent States (CIS).

Source: IMF *WEO*, 2007

Sources: IMF, World Economic Outlook database; and IMF staff calculations.
This time, China and India have shared in the inflows. But capital inflows have financed only reserve accumulation, not current account deficits as in the past.
Even Latin America is running CA surpluses and adding to reserves!

1ASEAN-4 countries include Indonesia, Malaysia, the Philippines, and Thailand. Newly industrialized Asian economies (NIEs) include Hong Kong SAR, Korea, Singapore, and Taiwan Province of China.
This cycle is different in some respects

• China and other recipients of capital flows in Asia and elsewhere are not using them to finance current account deficits,
• But rather to pile up international reserves,
• Most of which have traditionally been US treasury bills.
  – Now some diversification into other US assets
  – And into non-$ assets, such as €.
Unsustainable trend in US trade deficit

as Percentages of GDP

Trade & Current Account Balances 1960-2006
U.S. trade deficit

- **Deficits hit record levels by 2006:**
  - Goods & services & Current account deficits $\approx 6 \%$ GDP.
  - Would set off alarm bells in Turkey or South Africa (does).
  - Admittedly, some adjustment in 2007
    - Attributable to depreciated $ + slowdown

- **Shorter-term dangers:**
  - Protectionist legislation, scapegoating China.
  - Rising dependence on foreign investors $\Rightarrow$ hard landing for $$

- **Long-term dangers:**
  - US net debt to RoW now $\approx 2 \frac{1}{2}$ trillion, and rising.
  - Indebtedness will lower our children’s standard of living.
  - Dependence on foreign central banks & SWFs may $\Rightarrow$ loss of US global hegemony.
“Mainstream” View of Origins of US Current Account deficits

• Deficits affected by exchange rates & growth rates.
  – And indeed US TB has shown some improvement since 2006, presumably in response to depreciated $.

• More fundamentally, the US CA deficit reflects shortfall in National Saving
National Savings, Investment & Current Account, as shares of GDP

Figure 23.2. U.S. National Saving, Investments and Current Account

Net Natl Saving (% of GDP)
Net Domestic Investment (% of GDP)
Current Account (% of GDP)
The two global problems (US deficits and emerging market boom) have come together

• The US balance of payments deficit is now being financed by the People’s Bank of China, and other central banks & SWFs in East Asia & oil exporters.

• Will it continue?
Bretton Woods II: “China’s development strategy entails accumulating unlimited dollars.”

• Deutschebank view (Dooley, Folkerts-Landau, & Garber…):

• Today’s system is a new Bretton Woods, with Asia playing role that Europe played in 1960s.

• That much is right.

• DFL ideas were original:
  – China piles up $ not because of myopic mercantilism,
  – but as part of an export-led development strategy that is rational given China’s need to import workable systems of finance & corporate governance.
But it is not sustainable.

- It may be a Bretton Woods system, but we are closer to 1971 (date of collapse)
  - than to 1944 (date of BW agreement)
  - or 1958 (when convertibility first restored).

1. Capital mobility is much higher now than in 1960s.
2. The US can no longer necessarily rely on support of foreign central banks, either economically or politically.
3. China eventually will have to develop a workable domestic system of finance and corporate governance, or else suffer a domestic financial crisis.
   - => an end to excess liquidity pouring from China to US
The special role that the US & $ have had for more than 60 years could come to an end.

- “Exorbitant privilege” of funding US current account (or basic balance) deficits by borrowing in dollars

- As a safe haven, US has benefited from flight to quality

- Dollar as number one international currency
  - #1 reserve currency
  - other functions: invoicing trade & financial flows, etc.

- But the euro is now a credible rival
  - Chinn & Frankel (2007, 2008)
Chinn & Frankel (2008) simulation

**Figure 7:** Only accession countries join EMU in 2010, (UK stays out) but 20% of London turnover counts toward Euro area financial depth, and currencies depreciate at the 20-year rates experienced up to 2007.

€ passes $ around 2015
Five reasons China should let RMB appreciate, in its own interest

1. Overheating of economy
2. Reserves excessive.
   - It gets harder to sterilize the inflow over time.
3. Attaining internal and external balance.
   - To attain both, need 2 policy instruments.
   - In a large country like China, the expenditure-switching policy should be the exchange rate.
4. Avoiding future crashes.
5. RMB undervalued, judged by Balassa-Samuelson relationship.
1. Overheating of economy:

• Bottlenecks.
  Pace of economic growth (11%) is outrunning
  – Raw material supplies
  – Physical infrastructure
  – Environmental capacity
  – Level of sophistication of financial system.

• Stock market bubble.

• Inflation 6-7%
  => price controls (Sept. 2007), …
  => shortages and social unrest.
Attempts at sterilization where emerging markets have faced large inflows

- Sterilization is defined as offsetting of international reserve inflows so as to prevent them from showing up domestically as excessive money growth & inflation.

- In this decade, has PBoC has successfully sterilized for some years … until now.
  - The usual limitations are finally showing up:
    - Prolongation of capital inflows
    - Quasi- fiscal deficit
    - Failure to sterilize
    - Rising inflation
2. Foreign Exchange Reserves

• Excessive:
  – Though a useful shield against currency crises,
  – China has enough reserves: $1.65 trillion by April 4, 2008;
  – & US treasury securities do not pay high returns.

• Harder to sterilize the inflow over time.
While reserves (NFA) rose rapidly, the growth of the monetary base was kept to the growth of the real economy – even reduced in 2005-06.

Source: IFS and the PBC’s website.

Recently, China has had more trouble sterilizing the reserve inflow (as predicted)

- PBoC now pays higher interest rate domestically, & receives lower interest rate on US T bills
  => quasi-fiscal deficit.

- Inflation has become a serious problem.
  - True, global increases in food & energy prices are much of the explanation.
  - But
    - China’s overly rapid growth itself contributes.
    - Appreciation is a good way to put immediate downward pressure on local prices of agricultural & mineral commodities.
    - Price controls are inefficient and ultimately ineffective.
3. Need a flexible exchange rate to attain internal and external balance

• Between 2002 and 2008, China crossed from the deflationary side of internal balance (ES: excess supply, recession, unemployment), to the inflationary side (ED: excess demand side, overheating).
  – => Moved upward in the “Swan Diagram”
  – => appreciation called for under current conditions.
  – Together with expansion of domestic demand
    • gradually replacing foreign demand,
    • developing neglected sectors: health, education, environment, housing, finance, services

• General principle: to attain 2 policy targets (internal & external balance), a country needs to use 2 policy instruments (real exchange rate & spending).
China is now in the overheating + surplus quadrant of the Swan Diagram

- **Exchange rate** $E$
  - **ES & TB > 0**
  - **ED & TD**

- **Internal balance** $Y$
  - **ES & TD**
  - **YY: Internal balance $Y = \text{Potential}$**

- **External balance** $CA$
  - **BB: External balance $CA=0$**

- **China 2002**
  - **ED & TB > 0**

- **China 2008**
  - **ED & TD**
4. Avoiding future crashes

Experience of other emerging markets (1994-2002) suggests it is better to exit from a peg in good times, when the BoP is strong, than to wait until the currency is under attack.
5. Longer-run perspective: Balassa-Samuelson relationship

- Prices of goods & services in China are low
  - not just low relative to the United States (.23)
  - but also low by standards of Balassa-Samuelson relationship estimated across countries (which predicts .36).
  - before Dec. 2007 statistical revisions by IPC project

- In this specific sense, the yuan was undervalued by an estimated 35% in 2000
  - and is by at least as much today.
  - But wouldn’t imply need for sudden change of this size.
Estimation of B-S relationship for 2000
(118 countries, PWT)

• For every 1% increase in real income/capita (relative to US), prices increase .38% (relative).
• China’s estimated residual was .45 in logs (Frankel, 2006)
• Subramanian, 2008, estimates only .15, on revised ICP stats.
Does the Balassa-Samuelson relationship have predictive power?

- Typically across countries, gaps are corrected halfway, on average, over subsequent decade.

- $\Rightarrow$ 3-4% real appreciation on average per year, including effect of further growth differential

- Correction could take the form of either inflation or nominal appreciation, but appreciation is preferable.
What about China’s currency reform announced in July 2005?

• China did not fully do what it implied,
  – i.e., basket peg (with cumulatable +/- .3% band).
  – Frankel & Wei (2007) estimates:
    • De facto weight on $ still very high.
    • Little appreciation against the implicit basket,
    • only against $, as other currencies in basket appreciate against $.
    • => not close to floating

• More recently,
  – China has allowed more upward drift.
  – Will probably take further gradual steps.
    • It’s just a matter of Hu and Wen.
If China gave US politicians what they say they want...

• we’d regret it.
  – especially if it included reserve shift to match switch in basket weights.

• US TB & employment wouldn’t rise
  – fall in US bilateral trade deficit with China would be offset by rise in US bilateral deficit with other cheap-labor countries,

• but US interest rates probably *would* rise.
  – possible hard landing for the $. 

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