Choices for China; Consequences for Us

The views expressed here are those of the speakers and do not necessarily represent the views of the Federal Reserve Bank of St. Louis or of the Federal Reserve System.

Federal Reserve Bank of St. Louis
May 10, 2016
PROGRAM

• Introduction and Welcome

Cletus C. Coughlin, senior vice president and chief of staff to President and CEO James Bullard

• Presentation: Choices for China; Consequences for Us

Christopher J. Neely, economist and assistant vice president in the Research division of the Federal Reserve Bank of St. Louis

• Panel Discussion and Audience Q&A

Neely will be joined by fellow St. Louis Fed economists Cletus C. Coughlin and YiLi Chien
CHOICES FOR CHINA;
CONSEQUENCES FOR US

Christopher J. Neely, Ph.D.
U.S., WORLD STOCK MARKETS SLIDE AS PANIC IN CHINA SPREADS

Stalled Chinese Reforms, Stalled Chinese Economy

China's Selling Tons of U.S. Debt. Americans Couldn't Care Less.

China's Forex Reserves Fall by Record $107.9 Billion on Yuan Fears

Who's your debt daddy? China tops list of US foreign creditors once more

China's Sale of U.S. Debt – Beginning of the End?

Asian stock markets drop as China devaluation, oil and Fed stoke fears

Bank regulation in China: Letting go
China’s policy choices could affect us

“It [2008] was a time of a financial crisis and a bear market. ... But now the root cause is basically China. ... So, a hard landing [in China] is practically unavoidable.”

– George Soros, January 21, 2016

➢ “Think twice before declaring war on Chinese currency.”

– People’s Daily, January 27, 2016
China’s policy choices could affect us

- China is the U.S.’s 2nd largest trading partner.
- China holds the most Treasury debt of any foreign entity.
- China has the largest *foreign exchange (FX) reserves* in the world.
China’s policy choices could affect us

- But China’s growth has slowed, interest rates have fallen.
- China’s August 2015 currency devaluation roiled markets.
  - The S&P 500 dropped 10%.
- Reserves have declined by $800 billion since June 2014.
  - Almost half the size of QE1.
- What are China’s policy choices?
- How could those choices affect the United States?
China’s policy choices could affect us

- China holds very large FX reserves.

Top Holders of FX Reserves in Trillions of USD

- China: 3.35
- Japan: 1.97
- Saudi Arabia: 0.57
- Switzerland: 0.43
- Taiwan: 0.62
- Rest of World: 1.21

Source: IMF/Haver.
EXCHANGE RATES
What is the Chinese currency called?

- Renminbi translates as “the people’s currency.”
- Yuan is the unit of account.
- “Renminbi/yuan” compares to “sterling/pound.”
- Abbreviations:
  - CNY is the official abbreviation.
  - RMB is commonly used.
  - CNH describes CNY in offshore accounts.

How do flexible exchange rates work?

- An exchange rate is the relative prices of currencies.
  - Prices change with supply and demand.
  - An exchange rate reflects relative demand.
  - For example, greater Japanese demand for US goods and assets will tend to increase the JPY/USD rate.

- FX rates also depend on expectations.
How do flexible exchange rates work?

USD appreciates, JPY depreciates
USD depreciates, JPY appreciate
Managed Foreign Exchange Rates

- Managed rates are more stable than flexible rates.
  - Facilitate business planning.
  - Firms want stable supply prices.
  - Firms can use derivatives to reduce uncertainty.
Managed Foreign Exchange Rates

- About 1/3 of countries have *floating* rates.
  - A float means no commitment to an FX rate.

- About 2/3 of countries *manage* their FX rate.


- Countries with conventional pegs vs. USD in 2014:
  - Aruba, The Bahamas, Bahrain, Barbados, Belize, Curaçao and Sint Maarten, Eritrea, Jordan, Oman, Qatar, Saudi Arabia, South Sudan, Turkmenistan, United Arab Emirates and Venezuela.
Managed Foreign Exchange Rates

- Fixed vs. flexible arrangements have tradeoffs.

- Governments must use policy to control the FX rate.
  
  - More on “how” later.
How to fix a price?

- Market: Buy or sell to affect the price:
  - Agricultural price supports
  - Federal Reserve open market operations

- Regulatory: Outlaw and/or regulate transactions:
  - Minimum wage
  - Import quotas
CHINESE ECONOMIC HISTORY AND POLICIES
China manages its exchange rate

- China’s government controls its FX rate with several tools:
  - Monetary policy and fiscal policy
  - Exchange and capital controls

- Both level and volatility matter.
  - The level matters for trade.

- China cares about more than the USD value.
History of China’s Exchange Rate

- **Pre-2005**
  - Concerns about undervaluation
- **Post 2005**
  - Controlled CNY revaluation
- **Post 2013**
  - CNY depreciation

Source: Board of Governors of the Federal Reserve System (US)/FRED.
China has Capital Controls

- Capital controls restrict international asset sales.
- FX transactions must go through certain banks.
- Chinese residents can buy FX.
- Controls prevent “destabilizing” asset transactions.
  - Prevent “volatile” inflows.
  - Prevent speculation against the currency.
How did China accumulate reserves?

- Chinese firm sells goods abroad for USD.
- Firm sells the USD to an FX bank for CNY.
- People’s Bank of China (PBC) buys USD from banks.
  - This expands the domestic money supply (MS).
  - PBC reverses the domestic MS expansion.
- PBC buys assets from US with USD.
China’s FX reserves

2/3 of Chinese FX reserves in USD assets

Estimated Makeup of China FX reserves

- 67% in USD assets
- 25% in euros
- 8% in yen and pounds

Source: Financial Times.

Total Reserves Excluding Gold for China

Source: International Monetary Fund/FRED.
China’s FX reserves grow as current account surpluses accumulate.
Why does China keep reserves?

- To consume later: China is aging rapidly.
  - Why not domestic investment?

- For insurance: precautionary savings
  - Natural disasters
  - Concerns about the banking system
  - Financial flexibility and credibility
  - Asian currency crisis of 1997 was a lesson.
Why has China been selling reserves?

- Net capital outflows?
  - No.
  - It is difficult for foreigners to “short” Chinese assets.

- A transfer from PBC to residents?
  - Chinese citizens’ desire to hold foreign assets.
    - This limits the impact on the U.S.
  - But the loss of reserves can’t go on forever.
Why do Chinese want foreign assets?

- Growth has slowed; interest rates are lower.
- Fear of banking crisis and/or devaluation
  - A CNY devaluation raises foreign asset values.
How do reserves become private assets?

- Chinese citizens buy FX from FX banks.
  - Tuition, assets, travel.

- FX banks demand FX from PBC to replenish inventory.

- PBC sells foreign assets to get USD (or other FX).

- PBC sells USD to FX banks to replenish inventory.
  - This contracts the domestic money supply.
  - PBC reverses the domestic money supply contraction.
History of China’s Exchange Rate

China still holds very substantial FX reserves.

Sales have slowed considerably since January 2016.

“If something cannot go on forever, it will stop.”
-- Herb Stein
CHINESE POLICY CHOICES AND CONSEQUENCES
China’s Policy Choices

1. Restrict asset purchases by Chinese residents.
2. Use monetary or fiscal policy to boost the CNY.
3. Devalue CNY substantially.
4. Defer a choice and continue to sell reserves.
Stricter Capital Controls

- Have no particular implications for the U.S.
- Might require draconian enforcement.
- Would conflict with stated Chinese government goals.
- Interfere with efficient investment.
Monetary / Fiscal Policy to Boost CNY

- Tighter monetary policy will slow the economy.
  - The PBC has been easing policy.
  - More easing is expected.

- Expansive fiscal policy is a blunt instrument.
Monetary / fiscal policy to boost CNY

Chinese Short-Term Interest Rates

Source: PBC/TPI/NIFC/Haver.

- 3-Month CD Rate
- 6-Month Lending Rate
Devaluation of the CNY

- Can reduce fear of future devaluation.
- Must be substantial.
- Will increase USD value on FX markets.
- Will increase Chinese exports at expense of others.
- Will be stimulatory for China.
- Could provoke inflation.
- Might be better to float the CNY.
Devalue the CNY Substantially

The *trade-weighted* USD exchange rate is the USD’s value against a “basket” of currencies whose weights are determined by their shares of US trade.

A 10% CNY devaluation might trigger a trade-weighted USD appreciation of 2-5 percent.

<table>
<thead>
<tr>
<th>Top 6 Components of Trade-Weighted Index of U.S. Dollar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Weight (Percent)</td>
</tr>
<tr>
<td>25</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>15</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

Source: Federal Reserve Board.
Defer Choice; Continue to Sell Reserves

- Potentially problematic.
- $3 trillion of reserves is a *lot*.
- QE research (naively) suggests 50-100 bp higher US yields, across the whole curve.

Several factors mitigate against this impact:

- Sales reflect transfer to Chinese residents.
- No “signal” about future US monetary policy.
Size of Fed QE Purchases

- The QE total was $4 trillion.
- $3 trillion is a substantial amount of assets.
- Even the non-U.S. assets are highly substitutable for U.S. assets.

Source: Fawley and Neely (2013); Federal Reserve Board.
Summary

- Chinese residents have been buying a lot of the PRC government’s foreign bonds.

- Policy alternatives:
  - Tighten capital controls.
  - Tighten monetary policy.
  - Devalue the CNY.
  - Play for time.

- These might affect the U.S. economy.
Q & A
Acknowledgements

The author wishes to thank Michael Varley for his research assistance.