THE REVALUED RENMINBI

Owen Humpage
Research Department
Federal Reserve Bank of Cleveland
ON THE CHINESE RENMINBI

USDA Agricultural Outlook Forum

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China scores an unfair trade advantage against the United States by pegging the renminbi at an artificially attractive level relative to the U.S. dollar.
Today:

- Exchange-rate mechanism
Today:

- Exchange-rate mechanism
  - Real exchange rate
Today:

- Exchange-rate mechanism
  - Real exchange rate
  - Sterilization
Today:

- Exchange-rate mechanism
  - Real exchange rate
  - Sterilization
- Command economy
Today:

- Exchange-rate mechanism
  - Real exchange rate
  - Sterilization
- Command economy
- Greater flexibility
The views expressed here today are my own and not necessarily those of the Federal Reserve Bank of Cleveland or the Board of Governors of the Federal Reserve System.
RENMINBI DOLLAR EXCHANGE RATE

Renminbi per U.S. dollar

Nominal

Dollar appreciation

Dollar depreciation
3 things matters for trade and investment
3 things matters for trade and investment

USA prices in dollars
3 things matters for trade and investment

Chinese prices in renminbi

USA prices in dollars
3 things matters for trade and investment

| Chinese prices in renminbi | Dollars per renminbi | USA prices in dollars |
3 things matters for trade and investment

Chinese prices in renminbi < Dollars per renminbi < USA prices in dollars

Buy from China.
3 things matters for trade and investment

Chinese prices in renminbi > Dollars per renminbi > USA prices in dollars

Buy from USA.
Real exchange rate

\[
\text{REAL renminbi per dollar} = \frac{\text{renminbi per dollar}}{\left(\frac{\text{USA prices in dollars}}{\text{Chinese prices in renminbi}}\right)}
\]
RENMINBI DOLLAR EXCHANGE RATE

Renminbi per U.S. dollar

Nominal

Real

Dollar appreciation

Dollar depreciation
RENMINBI DOLLAR EXCHANGE RATE

Renminbi per U.S. dollar

Nominal

Real

-11%

Dollar appreciation

Dollar depreciation
RENMINBI DOLLAR EXCHANGE RATE

Renminbi per U.S. dollar

Nominal

Real

Dollar appreciation

Dollar depreciation

+17%
INFLATION RATES

12-month percent change in CPI

China

U.S.
RENMINBI DOLLAR EXCHANGE RATE

Renminbi per U.S. dollar

Nominal

Real

Dollar appreciation

Dollar depreciation

“…it is difficult to arrive at any firm and robust conclusions about the equilibrium level of the renminbi-dollar exchange rate using existing techniques.”

[IMF 2004]
If China undervalued its exchange rate....
CHINA’S OFFICIAL RESERVES

Billions of dollars, end of quarter

If China undervalued its exchange rate....
INFLATION RATES

12-month percent change in CPI

China

U.S.
If China undervalued its exchange rate….

Sterilized the reserve accumulation
STERILIZATION OF RESERVE FLOW

Percent

Trillions of renminbi

4-quarter change in foreign exchange reserves

-10 0 10 20 30 40 50 60 70 80 90 100

Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 2003 2004 2005

Trillions of renminbi

2.0 1.8 1.6 1.4 1.2 1.0 0.8 0.6 0.4 0.2 0.0 -0.2

Q1 2005
STERILIZATION OF RESERVE FLOW

- 4-quarter change in foreign exchange reserves
- 4-quarter change in monetary base

Trillions of renminbi

Percent

2003 2004 2005

Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1
-10 0 10 20 30 40 50 60 70
80 90 100

Trillions of renminbi

2.0 1.8 1.6 1.4 1.2 1.0 0.8 0.6 0.4 0.2 0.0 -0.2

Percent

4-quarter change in foreign exchange reserves
4-quarter change in monetary base

Q1 2003
Q2 2003
Q3 2003
Q4 2003
Q1 2004
Q2 2004
Q3 2004
Q4 2004
Q1 2005

Trillions of renminbi

2.0 1.8 1.6 1.4 1.2 1.0 0.8 0.6 0.4 0.2 0.0 -0.2

Percent
STERILIZATION OF RESERVE FLOW

- Four-quarter change in foreign exchange reserves
- Four-quarter change in monetary base

Percent
Trillions of renminbi

Q1  Q2  Q3  Q4  Q1  Q2  Q3  Q4  Q1  Q2  Q3  Q4  Q1

2003 2004 2005

Trillions of renminbi
-10  0  10  20  30  40  50  60  70  80  90  100
Percent

-0.2  0.0  0.2  0.4  0.6  0.8  1.0  1.2  1.4  1.6  1.8  2.0

Trillions of renminbi

4-quarter change in foreign exchange reserves
4-quarter change in monetary base
Why rapid trade, surplus, and reserve accumulation?

A command economy
Greater flexibility…..

- Independent monetary policy
- Protection from shocks
Greater flexibility…..

- Independent monetary policy
- Protection from shocks
  => Flexible exchange rates
  => Forward & derivative markets
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