

RMB regime change – a leftist approach

NOMURA

Global Foreign Exchange Research

Simon Flint
simon.flint@nomura.com

June 2012 See Disclosure Appendix A-1 for the Analyst Certification and Other Important Disclosures © Nomura

China's leftist approach

NOMURA

Conventional: $interest\ rate = f(inflation, output, FX\ rate)$

Chinese: $interest\ rate\ \&\ FX\ rate = f(inflation, output)$

Three reasons.... A) China already does this

NOMURA

A) (i) CNY and inflation

A) (ii) ... Growth, inflation etc

	Measured as	Regression Coefficients	P-value
CPI	YoY Change (%)	-0.02	0%
Basket	Mom Change (%)	0.06	0%
Event	Dummy variable	-0.08	38%
IP	YoY Change (%)	-0.02	25%
Intercept		0.19	33%

Note: A multi-variate linear regression was run for monthly changes in USD/CNY against these variables. The resultant model has an R-squared of 35%. Note that the estimations are conducted in USD/CNY terms – so the inflation coefficient should be negative, i.e. when inflation is relatively high, USD/CNY should be falling relatively rapidly. Regression results for USD/CNY monthly changes with all factors from August 2008 through April 2012.

Source - Nomura, Bloomberg, CEC

... B) Japan terrifies, and C) Asia inspires

NOMURA

KRW-NEER versus output gap*

Since end-2004 Korea has accumulated USD160bn+ in reserves, (USD/KRW was at 1,035 at end 2004), and the NEER has fallen >20%.

* Output gap calculated as the difference in actual IP (seasonally adjusted) and trend IP

Source - Nomura, Bloomberg, CEC

Implications, 1 & 2

NOMURA

1. a. Significant reserve loss (e.g. Malaysia)

Adjusted FX reserves (and FX forwards) have fallen by a median 25% during times of market stress.

FX reserve accumulation (adjusted for valuation and output effects, net of FX flows, USD bn)

Apr-01 Oct-01 Apr-03 Oct-04 Apr-06 Oct-07 Apr-09 Oct-10

1. In the event USD/CNY is allowed to rise, China's reserve losses could be surprisingly large, as China controls the speed and extent of the move.

2. Greater reserve volatility is likely to have a significant impact on major FX markets. After selling USDs, China is likely to have to sell other currencies to keep its currency shares constant.

Reserve rebalancing worth USD960*0.25/1.25 = EUR192bn

1. b. Large illicit capital stock – misinvoicing +USD900bn

Year	Under-recorded earnings for foreign investment in China		Capital flows disguised as trade flows		Est. adjustment required to correct account	
	Under-recorded earnings from China/CA	Under-recorded earnings	All mis-reporting in exports	All mis-reporting in imports		
2000	91.0	3.1%	22.8	1.4%	28.2	1.7%
2004	84.0	3.3%	27.7	1.2%	41.2	2.1%
2005	75.8	3.4%	33.3	2.4%	32.8	1.6%
2006	97.8	3.6%	37.7	2.1%	46.1	1.5%
2007	126.1	3.9%	72.7	2.1%	43.8	1.6%
2008	125.5	3.4%	81.2	1.8%	71.3	1.6%
2009	198.0	4.0%	90.3	2.0%	86.7	2.0%
2010	323.3	5.0%	166.3	2.8%	165.4	2.8%
2011	283.4	5.9%	154.0	2.1%	158.5	1.9%

Note: 25% of China reserves are approximately equal in USD\$60bn

Source - Nomura, Bloomberg, CEC

Implications, 3 & 4

NOMURA

3. The greater variability in USD-CNY will make the capital account more porous.

4. China could one-day assume a dominant role in global capital flows; as Japanese capital outflows did in 1980s.

Japanese capital outflows reached around 7% of GNP in 1987, or USD 137bn. Chinese equivalent (7% of GDP) would be about USD490bn.

NOMURA

Implications, 5 & 6

5. If China manages its FX rate to provide counter-cyclical support → risk of trade sanctions in 'new normal' world.

6. Prevalent role of CNY in most regional NEERs will lead to greater and potentially explosive trends in Asian FX.

6. a. CNY NEER* basket

6. b. USD coefficient (in HFP test) and BIS weights

Currency	USD effect	BIS NEER	Weight
CNY	93%	19%	N.A.
HKD	98%	8%	14%
PHP	82%	15%	15%
THB	77%	11%	18%
INR	74%	14%	17%
TWD	74%	13%	27%
IDR	73%	10%	16%
MYR	72%	14%	17%
KRW	65%	13%	28%
SGD	60%	13%	17%

* NEER basket in terms of CNY-CNY, rebased to match USD/CNY fix on 22 June 2010
Source: Nomura, Bloomberg, CEC

NOMURA

Implications, 7 & 8

7. This could ultimately result in an effective CNY bloc in Asia.

8. Chinese monetary policy may emerge as a second pole or anchor for the globe.

Source: Nomura, Bloomberg, CEC

NOMURA

Implications, 9 & 10

9. The whole process may prove difficult to control. Liberalization may beget more liberalization, which could contribute to altering the Chinese economic and political system.

10. If the Chinese seek to retain or regain control over the CNY, liberalization efforts may not be one-way; as we have found in the cases of Korea, Taiwan, and Indonesia.

Source: Nomura, Bloomberg, CEC

NOMURA

RMB regime change – APPENDICES

Global Foreign Exchange Research
Simon Flint
simon.flint@nomura.com
June 2012

See Disclosure Appendix A-1 for the Analyst Certification and Other Important Disclosures

NOMURA

Time trend of USD/CNY

Time trend of USD/CNY¹

¹ The non-linear time trend over the full sample underpins a linear time trend (R-squared of 96% versus 92%) and fits with our intuitive understanding. The diagram shows the result for a 90% regression of an adjusted sample (mid-2005 through mid-2008, with the rebased used to project through mid-2007). The regression is of the form 8.082 - 0.06 (P). Source: Bloomberg and Nomura.

Source: Nomura, Bloomberg, CEC

NOMURA

Impact of G3 on Asian NEERs: High Frequency Pegging test and BIS

Overall results (2005 to 2012, weekly)

Currency	Dollar	Euro	Yen	R-Sq
HKD	98%	2%	0%	100%
CNY	93%	6%	1%	99%
SGD	60%	34%	1%	84%
TWD	74%	25%	0%	87%
MYR	72%	29%	0%	77%
PHP	82%	27%	0%	79%
THB	77%	25%	0%	69%
INR	74%	34%	0%	80%
IDR	73%	33%	0%	59%
KRW	65%	17%	0%	46%
AUD	44%	100%	0%	50%

Contribution of USD, EUR, JPY and CNY in Asian BIS-NEER baskets

	US	Euro Area	Japan	China
China	19.0	19.4	15.9	N/A
Taiwan	13.5	11.1	18.7	26.8
Hong Kong	8.3	12.5	11.8	14.0
India	14.1	22.1	8.9	16.6
Korea	11.0	11.0	15.7	16.3
Indonesia	10.1	13.4	16.3	27.9
Malaysia	14.9	12.6	13.1	17.4
Philippines	14.9	11.5	17.9	14.9
Singapore	13.3	12.8	11.0	17.2
Thailand	10.5	11.3	20.5	17.9

HFP results: CNY

Year	Dollar	Euro	Yen	R-Sq
2005	98%	1%	1%	100%
2006	99%	1%	0%	97%
2007	89%	1%	0%	95%
2008	83%	1%	0%	98%
2009	88%	1%	0%	99%
2010	83%	1%	0%	98%
2011	84%	1%	0%	98%
2012	88%	1%	0%	99%

HFP results: MYR

Year	Dollar	Euro	Yen	R-Sq
2005	97%	1%	0%	98%
2006	74%	22%	0%	83%
2007	78%	54%	0%	76%
2008	84%	20%	0%	88%
2009	79%	32%	0%	87%
2010	86%	23%	0%	86%
2011	83%	41%	0%	86%
2012	44%	100%	0%	45%

HFP results: KRW

Year	Dollar	Euro	Yen	R-Sq
2005	53%	15%	0%	68%
2006	47%	34%	0%	52%
2007	75%	49%	0%	97%
2008	108%	17%	0%	37%
2009	63%	183%	0%	39%
2010	54%	52%	0%	32%
2011	53%	54%	0%	38%
2012	52%	58%	0%	34%

Note: Test at 1% indicates a p-value greater than 20%; test at 5% indicates a p-value between 5% and 20%; test at 10% indicates a p-value less than 5%. Source: Nomura, BIS, Bloomberg, CEC

