

China Currency Tracker: Technical Appendix

This appendix covers some conceptual issues related to exchange rates, and describes the construction of the data presented in the interactive feature.

Nominal exchange rates are the prevailing market rates that are used to buy and sell different currencies on foreign exchange markets. A better measure of external competitiveness is a country's real exchange rate, which adjusts the nominal, market-based exchange rate for domestic inflation relative to foreign inflation.

The set of countries included in the China Currency Tracker comprises the top trading partners and top export markets for China in 2010 plus the euro area (see Table 1). We include the Netherlands, the U.K., and Italy, which are not among the top ten trading partners of China but are among the top ten export markets for its goods.

Table 1: China's Top Trading Partners in 2010

Shares of Total Chinese Trade		Shares of Total Chinese Exports	
United States	13.0%	United States	17.9%
Euro area	12.6%	Euro area	14.8%
Japan	10.0%	Hong Kong	13.8%
Hong Kong	7.7%	Japan	7.6%
Korea	7.0%	Korea	4.4%
Germany	4.8%	Germany	4.3%
Australia	2.9%	Netherlands	3.1%
Malaysia	2.5%	India	2.6%
Brazil	2.1%	United Kingdom	2.5%
India	2.1%	Singapore	2.0%
Singapore	1.9%	Italy	2.0%

Note: Trade in goods.

Source: IMF Direction of Trade Statistics

For each country, we obtain monthly consumer price index (CPI)-based inflation rates from the IMF's International Finance Statistics and end-of-month bilateral exchange rates (between the domestic currency and the renminbi) to compute the real exchange rate. The real exchange rate is defined as the change in the nominal exchange rate plus the inflation differential (Chinese inflation minus foreign inflation) over a specified period.

Data for effective exchange rate indexes are obtained directly from the Bank of International Settlements (BIS). The real effective exchange rates are the multilateral trade-weighted averages of bilateral exchange rates adjusted by relative consumer prices, while the nominal effective exchange rates are the trade-weighted averages of the bilateral nominal exchange rates. The weights for the BIS effective exchange rates are based on trade flows over the period 2008-2010 and cover a broad sample of 61 trading partner countries.

The China Currency Tracker shows changes in effective and bilateral exchange rates between four recent reference points and the latest period for which data are available for all relevant variables (March 2012). The reference points are:

1. January 2000, just prior to China's WTO accession;
2. June 2005, when China depegged its currency from the US dollar;
3. May 2010, when China again depegged its currency (after repegging it to the US dollar during the global financial crisis);
4. March 2011, one year ago.

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