

# SIEPR

## *policy brief*

Stanford Institute for Economic Policy Research

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## China's Exchange Rate Policy and Fiscal Expansion

By *Ronald McKinnon*

Tensions between the U.S. and China escalated recently when the new U.S. Secretary of the Treasury, Timothy Geithner, suggested in mid January that China might be designated as a “currency manipulator”. This prompted Premier Wen Jiabao on January 29 to mount a vigorous defense of China’s existing exchange rate policy at a high-level meeting of world leaders at Davos, Switzerland. Mr. Wen pledged to keep the renminbi at a “reasonable and balanced level”.

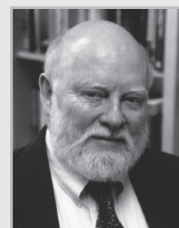
There is a good economic

rationale for China’s wanting to keep the yuan/dollar rate stable. First, as long as the fixed rate is credible — as it was between 1995 and 2004 at 8.28 yuan per dollar — it served as an effective monetary anchor for China’s internal price level. After inflation had exploded to more than 20 percent per year in 1993-95, the fixed rate anchor helped China regain price-level stability. Second, the big fiscal stimulus, which Premier Wen is now contemplating, would be most effective if

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### About The Author

**Ronald McKinnon** is the William D. Eberle Professor of International Economics at Stanford University, where he has taught since 1961. He is also a SIEPR/SCID Senior Fellow.



His fields of interest are international economics and development finance. McKinnon has written over 100 articles and several books, which include: *Money and Capital in Economic Development* (1973); *Money in International Exchange: The Convertible-Currency System* (1979); *The Order of Economic Liberalization: Financial Control in the Transition to a Market Economy*, 1993; *The Rules of the Game: International Money and Exchange Rates*, 1996; *Dollar and Yen: Resolving Economic Conflict Between the United States and Japan* (with Kenichi Ohno), 1997; and *Exchange Rates under the East Asian Dollar Standard: Living with Conflicted Virtue*, in 2005.

His books have been translated into many European and Asian languages, and he has been a consultant to central banks and finance ministries the world over—including international agencies such as the World Bank and International Monetary Fund.

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China's exchange rate were kept stable — as it has been since last July.

## Monetary Control: Lost and Then Regained

However, China bashing, i.e., mainly U.S. pressure to appreciate the RMB, had become intense by 2004. To deflect American protectionist threats, the Chinese authorities began, as of July 21, 2005, to allow the renminbi to

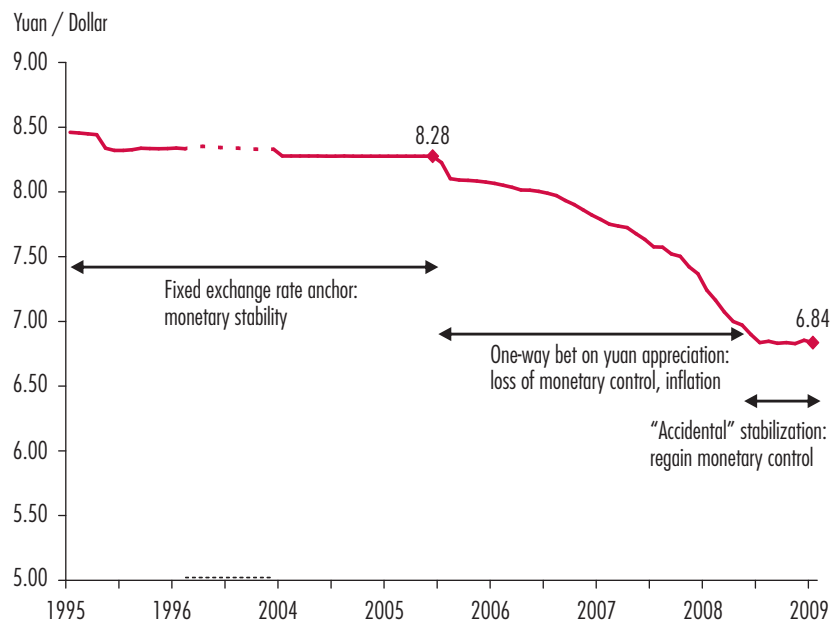
appreciate slowly — about 6 percent per year against the dollar (figure 1). But the resulting one-way bet that the renminbi always rises prevented private capital outflows from financing China's huge trade surplus. Chinese banks and other financial institutions refused to acquire predictably depreciating dollar assets. Compounding the situation, inflows of interna-

tional “hot” money to buy ever-higher renminbi assets led to enormous balance of payments surpluses.

To prevent the renminbi from ratcheting upward, the People's Bank of China (PBC) intervened massively to sell renminbi and buy dollar assets. By July 2008, China had accumulated about \$2 trillion in official exchange reserves. Despite massive sterilization efforts by the PBC, including imposing high reserve requirements on commercial banks, excess domestic money growth aggravated inflation from 2006 to July 2008. China's CPI inflation peaked at 8 percent in the spring of 2008.

Then, after the U.S. credit crunch of July 2008, the weak dollar became the strong dollar: the surprise 20 to 30 percent dollar appreciation against all major currencies, except the Japanese yen, that is still with us. This general

**Figure 1**  
**China's Monetary Policy and the Yuan/Dollar Rate (1995 – 2009)**



Source: FRB

dollar appreciation carried the renminbi, which was and is pegged to the dollar, upward with it. Unsurprisingly, the PBC stopped the gradual appreciation of the renminbi against the dollar so that the yuan/ dollar rate has been remarkably stable at about  $6.85 \pm 0.3$  percent since last July (figure 1).

With the end of the one-way bet on appreciation of the yuan/dollar rate since last July, hot money inflows have stopped. Because the PBC could then regain monetary control, it has cut the reserve requirements on China's commercial banks — which (unlike their American counterparts) are rapidly expanding domestic credit in late 2008 and early 2009. More private capital (including trade credit) is now flowing outward to help finance China's trade surplus, and official exchange reserves have stopped increasing.

### Purchasing Power Parity?

What about the level of China's exchange rate? The cumulative controlled appreciation of the RMB against the dollar from July 2005 to July 2008 was about 20 percent. But then the surprise ratcheting up of the dollar from July 2008 to February 2009 against most other currencies was another 25 percent. So the combined effect was a sharp appreciation in China's "real" trade-weighted exchange rate

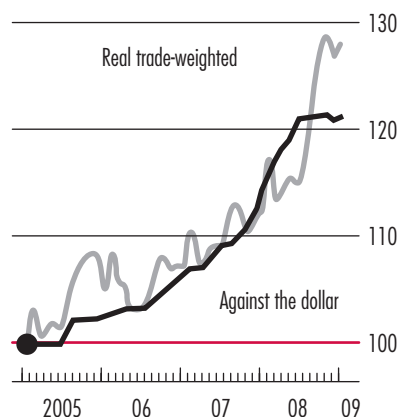
against all countries from 2005 to the present, as shown in the left-hand panel of figure 2.

In a world of fluctuating exchange rates, nobody can have any accurate idea of what is a fair or "equilibrium" level for the exchange rate. In economies open to international capital flows, a country's net trade (saving) surplus is an oft-used but flawed indicator — as discussed below. A more ven-

**Figure 2**  
**China's Comparative Price Level in Hamburgers**

#### Food for thought

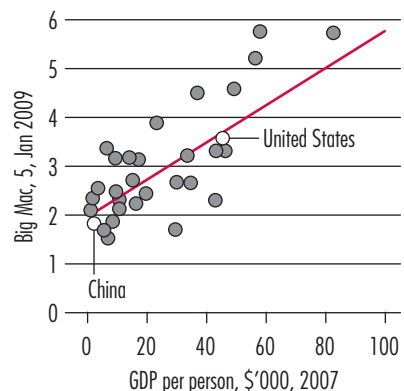
The yuan, January 2005 = 100



Sources: BIS; Thomson Datastream; *The Economist*, IMF

Source: *The Economist*, Feb 5th 2009

Big Mac prices versus GDP per person  
Selected countries



erable idea, attributable to the Swedish economist Gustav Cassel writing in 1920, is that of purchasing power parity. In economies open to foreign trade, Cassel suggested that, on average, exchange rates should line up so that country A's currency has the same purchasing power over a representative basket of goods and services as country B's.

However, in a world of both rich and poor countries, Cassel's theory now has a generally accepted modification. In poor countries with low wages, the prices of nontradable goods and services (such as haircuts) are much lower than the prices of nontradables in wealthy (high wage) countries—even though the price of highly tradable goods such as textiles and automobiles are similar. So one dollar will have greater purchasing power in a poor country. But how much lower is “normal”?


Using data from more than 100 countries, researchers at the University of Pennsylvania have made such a calculation by pricing out a common “international” basket of goods in each currency. They found that, at prevailing exchange rates, poor countries do have much lower price levels. But the data collecting is so onerous and expensive they can only construct “The Penn World Tables” once every 10 years!

Enter *The Economist* magazine with its “Big Mac” hamburger standard. McDonald's carefully monitors the many ingredients in a Big Mac to be the same in the scores of countries where hamburgers are sold. Moreover, as per capita income rises across countries, the dollar price of a Big Mac tends to increase approximately in line with that found in the decennial estimates in the Penn World Tables. But the prices of hamburgers are

much easier to collect and are available at frequent intervals.

As of January 2009, the upsloping regression line in the right hand panel of figure 2 shows how the dollar prices of Big Macs rise with per capita income. Since July 2008, the appreciation of the dollar with the RMB tied to it has lifted the price levels (in Big Macs) of both countries so that they are both on the regression line. That is, China's exchange rate and price level are about where they should be for countries of similarly low per capita income, and Big Mac prices in the U.S. are about average for countries with similarly high per capita income. Thus our modified version of purchasing power parity shows that both the RMB and dollar exchange rates are, as of early 2009, aligned more or less correctly with each other (at 6.85 yuan/dollar), and with the average  
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exchange rates of other trading partners throughout the world economy.

### **The Quid Pro Quo**

Ending China bashing once and for all is more than just a political issue. In both the U.S. and Europe, economists — and the politicians they indoctrinate — must discard the false theory that one can use changes in the exchange rate to control the net trade balance in a predictable way. Contrary to widely held beliefs in both China and the U.S., a discrete appreciation of the renminbi against the dollar would not reduce China's trade surplus or America's trade deficit. A discrete appreciation of the renminbi could have the perverse effect of causing investment in China to slump, as firms see China becoming a higher cost area. Then China's net saving (trade) surplus could actually increase!

Instead of being an exchange rate question, the huge trade imbalance between the two countries has two related causes: "surplus" saving in China, i.e. domestic saving far beyond that which is needed to finance domestic investment; and from an even bigger net saving deficiency in the United States. Since the collapse of the housing bubble in 2008–09, U.S. household consumption has plunged and saving has risen, depressing the global economy while reducing the U.S. trade deficit. In order to buoy China's and the world economy while further correcting the festering trade imbalance between China and the United States, fiscal expansion in surplus-saving countries like China is desperately needed. Because U.S. fiscal expansion would enlarge the U.S. trade deficit,

better to convince the Chinese that they should do most of the fiscal stimulating.

Because fiscal expansion in China would be most effective in buoying the Chinese economy when the exchange rate is stable, having Americans agree to the PBC stabilizing the yuan/dollar rate is the natural quid pro quo for China's engaging in a much greater fiscal expansion than the welcome half-trillion dollar amount announced on November 9, 2008. Indeed, as the world goes into a severe economic downturn, the threat of beggar-thy-neighbor devaluations becomes acute—as in the 1930s. Thus, stabilizing the exchange rate between the world's two largest trading countries could be a useful fixed point for checking the devaluationist proclivities of other nations around the world.

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