China's Market Volatility:
Causes, Policy Options, and Implications

肖耿
XIAO Geng

gxiao@brookings.edu
gxiao@tsinghua.edu.cn

October 15, 2009

China's Near-Term Market Volatility

- China's real economy does not seem to be affected more than the developed economies by the global financial crisis.

- However, its stock and property markets experienced the roller-coaster type volatility, much worse than in developed markets within a very short period.

- The unexpected external shocks and even more dramatic policy responses by the Chinese authorities have created confusions and uncertainties for investors and policy-makers

Questions about China's market volatility

1. What are the key domestic and international, structural and monetary factors in making this sizzling volatility show?
2. What are the policy options for China given the global economic slowdown and zero interest rate in most developed economies, if China would like to stabilize the markets without sacrificing the growth of real income and employment?
3. What is the role of monetary policy in dealing with the balance sheet problems (debt crisis)?
4. What are the consequences of future inflation on China's nominal income catching-ups and the efficiency of real resources allocation?
5. What are the implications for China and for the global economy?

Misunderstandings about macroeconomics

- RMB appreciation/depreciation
  - is more about China's inflation/deflation rather than about China's competitiveness; Inflation and RMB appreciation are substitutes in the longer run and they are equivalent channels for the adjustment of China's domestic price level relative to that of US (real appreciation of RMB)
- Current account surplus
  - is more about exporting of surplus capital which cannot hire surplus labor productively, than about competitiveness.
- China's competitiveness
  - is more about declining transaction costs due to reform, rapid technological progress due to opening and globalization, and low labor costs due to large surplus rural labor than exchange rate adjustment and current account imbalance
- Bubbles in property and stock markets
  - is more about low or negative real interest rates and inefficient investment than about exchange rate, current account surplus, inflation or competitiveness

China's Macro Challenges Before and after the Global Financial Crisis

- China's macroeconomic conditions and capital market development before and after September 2008

    1. Surplus labor (or hidden unemployment)
    2. Surplus capital (excessive liquidity)
        - is more about China's inflation/deflation rather than about China's competitiveness; Inflation and RMB appreciation are substitutes in the longer run and they are equivalent channels for the adjustment of China's domestic price level relative to that of US (real appreciation of RMB)
    3. Price distortion: inflation, price control and dominance of large SOEs
        - Rising prices in food, oil, raw materials
        - Rising wages due to inflation and labor contract law
        - Inefficient use of energy, natural resources and environment.
    4. High volatility and bubbles in the property and stock markets

China's Surplus Labor and Employment Challenge

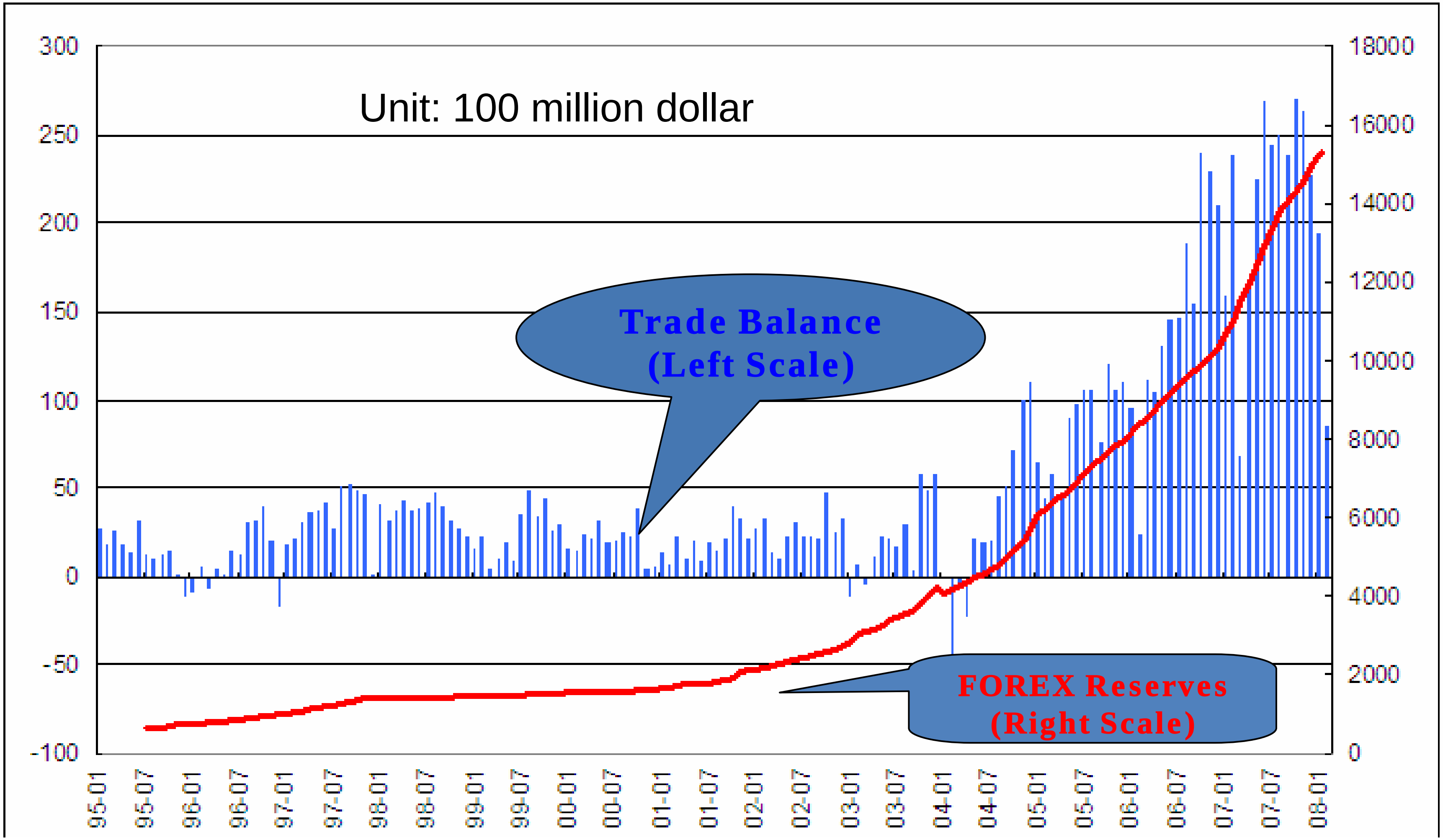
- In 2006 the total employment in China is 764 million
  - 119 million of migrant workers (average monthly wage of $120)
  - 362 million rural workers.
  - 481 million unskilled workers (119+362)

- 481 million rural and migrant workers in China face 2 choices
  - stay in the villages
  - find jobs in the cities

- If migrant workers stop working, their unemployment will not be counted in the official unemployment statistics
  - This hidden unemployment increased sharply this year according to observations by local officials in coastal provinces, especially after the start of the global financial crisis in September 2008

China's Surplus Capital

9% of GDP in 2006;11.5% of GDP in 2007



清华-布鲁金斯公共政策研究中心
BROOKINGS-TSINGHUA CENTER FOR PUBLIC POLICY

China is Subsidizing the Whole World due to Inefficient Investment!

- Price controls on energy and raw materials
  - which distort prices for major factor inputs
  - leading to over-use of energy and raw materials and environmental damages
- Unclear ownership or state ownership of natural resources
  - which distorts prices for many natural resources
  - leads to over-use of natural resources and environmental damages
- Large SOEs in the monopoly sectors
  - distort prices of their products and services
  - Leading to over-use (i.e. electricity) or under-use (i.e. telecom services) of their products and services

- China is effectively subsidizing consumers of Made-in-China products around the world, which is *not* sustainable!

SOEs Performed Worse than Non-SOEs but still Dominated in Strategic Sectors and among Large Enterprises

Structure and Performance of Top 500 Chinese Enterprises in 2007（%）

Ownership	No. of Firms	Profits	Assets	Employees	Taxes	Return on Assets
State	69.8	87.94	93.63	89.32	92.69	1.40
Collective	5.80	2.22	4.15	2.35	1.67	0.80
Private	17.8	7.08	1.73	7.00	3.94	6.08
Foreign	6.6	2.76	0.48	1.33	1.70	8.48

Source: China's Top 500 Enterprises, 2007.

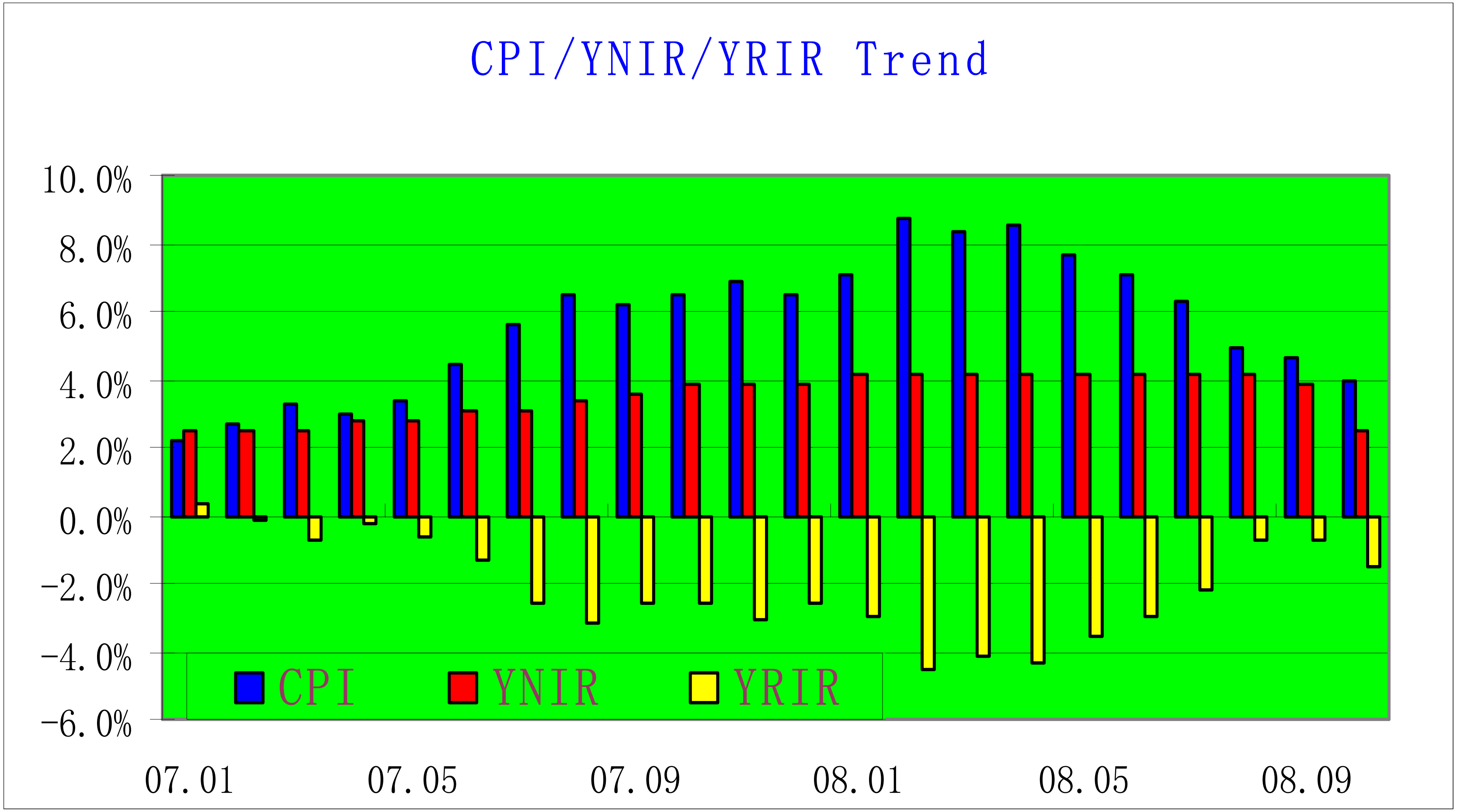
Real Interest Rate as a Price of Capital

- Real Interest rate = Nominal Interest Rate – Inflation Rate
- Expected Real Interest rate = Expected Nominal Interest Rate – Expected Inflation Rate
  - Expected Real Interest Rate will guide behavior of investors, producers and consumers since it is the real price of capital (costs to producers and income for consumers/investors).
  - Expected Nominal Interest Rate will be influenced by the central bank.
  - Expected inflation rate:
    - Which rate? CPI, PPI, property price, stock price, wages, commodity prices?
    - Structural inflation vs inflation driven by fiscal deficit
    - Inflation vs currency appreciation

Negative Real Interest Rate (-3% before September 2008) = nominal interest (4%)- inflation rate (7%)

- Negative real interest rate
  - which distorts the bench-marking price of capital
  - leading to the over-use of cheap credit by inefficient projects
  - instability of the property and stock markets
  - stock index fell about 60% from the peak in Oct 2007
- The distortion in factor prices
  - makes it difficult to find and finance more efficient projects
  - effectively raising the transaction costs of surplus capital hiring surplus worker
- Root of real negative interest rate
  - The direct root is inflation
  - But indirectly, it is currency appreciation and the expectation of appreciation that stopped the central bank from raising the nominal interest rate to fight inflation
- When inflation is falling, real interest rate turns positive and high, so the central bank can afford to reduce nominal rate aggressively

Real Interest Rate（YRIR)= Norminal Interest Rate (YNIR)- Inflation Rate (CPI)

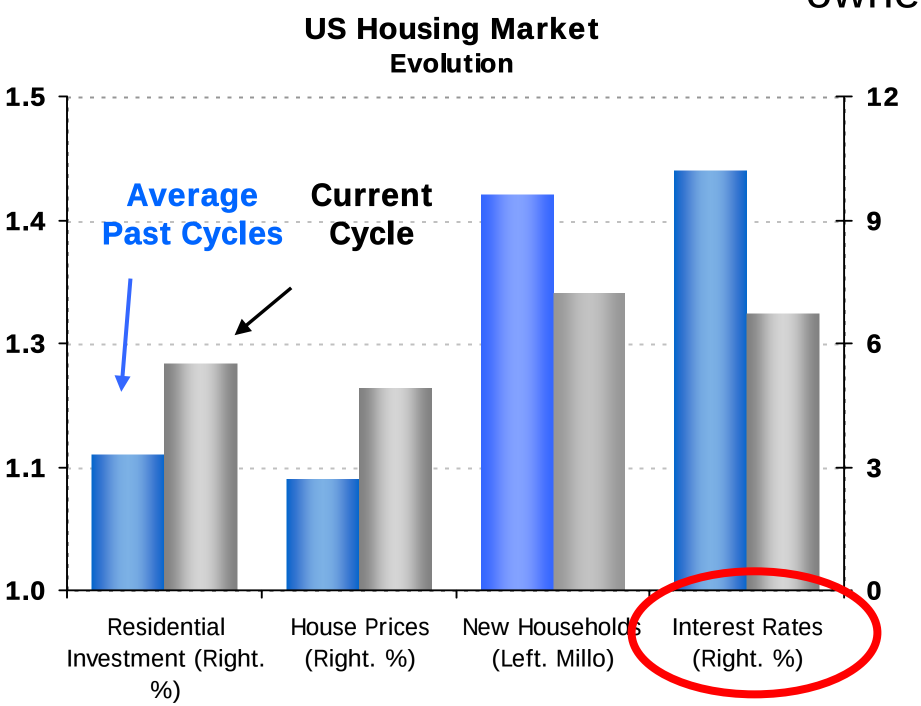


Data Sources: NBS and PBOC

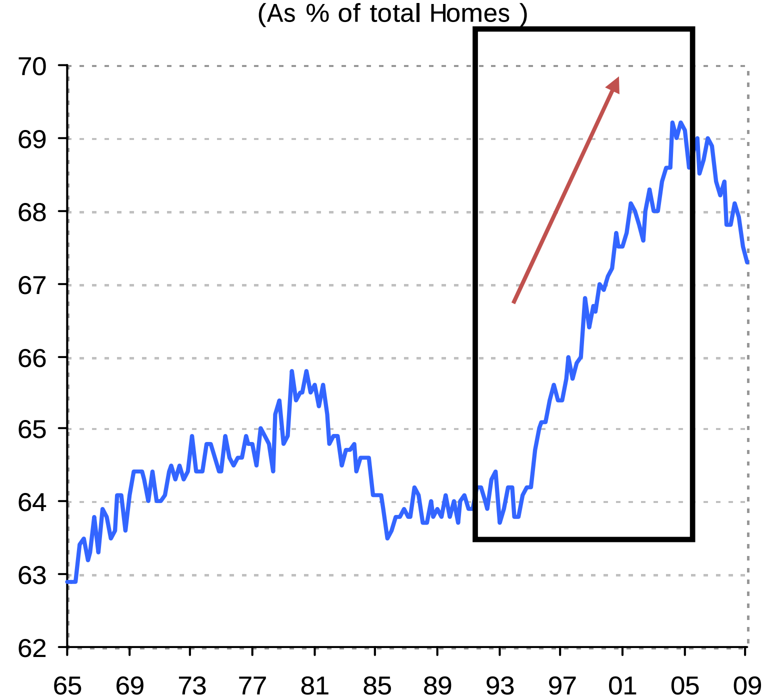
The Role of the Housing Sector in the Global Financial Crisis

In the US, despite the number of households that grew below the average of past housing cycles, <u>lower interest rates led to higher residential investment and higher housing appreciation</u>

Financial Innovation allowed new segments of the US population access to home ownership



Source: ERD BBVA

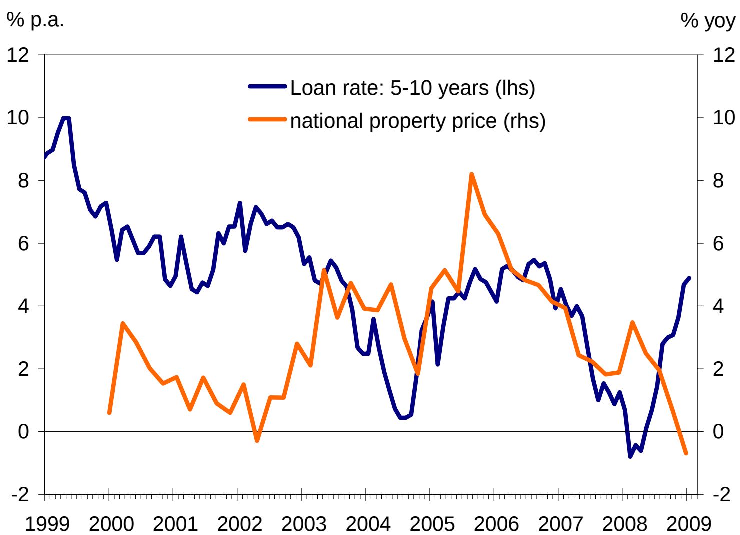


Source: Census

China's Real Mortgage Rates and Mortgage Loans

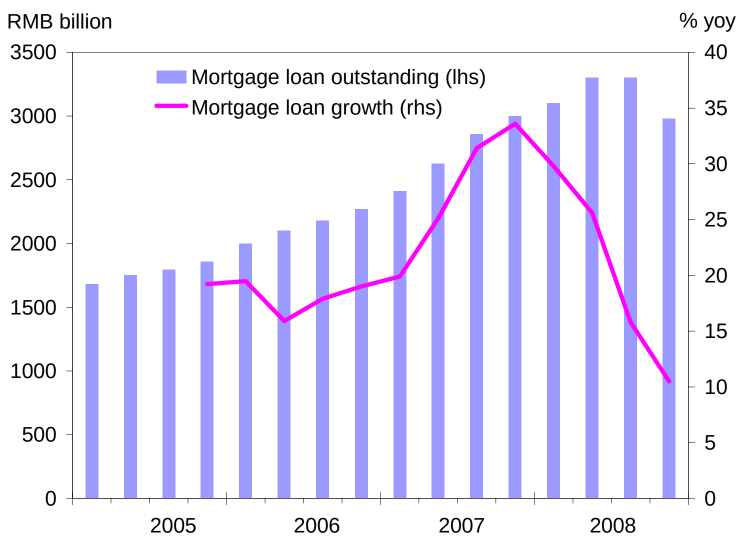
Interest rate and property prices have a negative, though lagging relationship. China's mortgage outstanding, though growing fast, remains small as a share of total bank loans. It is at around 10% at the end of 2008

Real Interest Rates and Property Prices



Sources: CEIC and BBVA estimates.

Mortgage Loan Outstanding



Source: Wind.

清华-布鲁金斯公共政策研究中心
BROOKINGS-TSINGHUA CENTER FOR PUBLIC POLICY

What Can China Do?
Stabilize RMB Exchange Rate to Facilitate RMB as an International Reserve Currency

- Completely stop the RMB appreciation expectation by going back to a more or less fixed rate with the US Dollar or a basket of currencies

- If necessary, it may be useful to allow the RMB to depreciate a significant amount so as to completely shake off the expectation of one-direction stable appreciation of RMB

- This policy option is needed for eliminating the unnecessary uncertainty and complications associated with speculative capital inflows and outflows

- This policy will also facilitate the evolution of RMB into an international reserve currency similar to dollar, Euro, and yen

What Can China Do?

Make Real Interest Rate Positive and Compatible with Opportunity Costs of Capital

- When the market no longer has the expectation of one-way steady RMB appreciation, PoBC can set the interest rates aggressively to deal with both inflation and deflation pressures

- When there are inflationary pressure, the central bank needs to raise the nominal interest rate is to off-set the inflation or inflation expectation so as to improve the investment and consumption efficiency and to avoid future asset bubbles

- The first half of 2008 would be the best time to raise interest rates since the stock market and property market in China was falling to low levels and were not likely to fall much further. China could use banking regulation to deter interest rate arbitrage, for example, impose taxes on interest earnings of those deposits used for interest rate arbitrage and install certain inflation-proof deposit rates if inflation becomes high, say above 8%. With no bubbles in property and stock markets and no expectation on RMB appreciation, the speculation on US-China interest rate gap will not be very profitable after deducting the transaction costs and taxes

- After the onset of global financial crisis since September 2008, inflation falls sharply and the threat of deflation becomes real, it become necessary for central bank to reduce nominal interest rate aggressively

What Can China Do?

Eliminate Price Controls and Subsidies to the Global Consumers of "Made in China" Products

- Now is the best time to free the prices for key factor inputs such as labor, land, energy, water, and raw materials given the slowdown of the global economy and the sharp decline of oil and raw materials prices
- Elimination of price control and implementation of aggressive fiscal stimulation package means that inflation at a high single digit level is likely to come back in the near future
- So price reforms should be carried out together with social safety net reforms that help and subsidize the income of the poor directly
- Price reforms can also be carried out by phase with a clear plan to guide the market expectation on the pace of price liberalization
- Price reform is likely to stimulate efficient supply and discourage wasteful and harmful use of natural resources

What Can China Do?

Simplifying Tax Regimes and Reduce Tax Rates to Improve Productivity and Efficiency

- As an emergency measure, China could temporarily (for example for the year 2009 and 2010) stop collecting some central and local taxes such as transactions taxes in the property and stock markets, and most central and local taxes applied to small and medium-sized enterprises
- As an emergency measure, China could also reduce most tax rates by 30% for the year 2009 and 2010
- The above temporary measures need not affect the reform of tax structures and tax rates in the long-term but would provide an opportunities to learn about the effects of less taxes and low tax rates on the efficiency of the economy, in addition to stimulating the economy
- The tax cuts proposed above will complement the fiscal stimulation package already proposed by the government to generate a sizable central government fiscal deficits of up to 5% to 7%

Seize the Present Opportunity to Encourage Innovation in the Capital Market and Strengthen Socially Beneficial Regulation

- Ensure that regulatory rules add social value and improve the enforcement capacity of all regulators
- Continue to privatize big SOEs and financial market participants so as to improve their competitiveness
- Speed up the development of traditional equity and bond markets to increase the leverage of the Chinese economy so as to reduce the risks of future non-performing loans in the banking sector
- Find innovative and low-risk mechanisms to make the RMB an international reserve currency to facilitate a smooth and fast development of China's capital market (see the proposal of "Shanghai Global Exchange" as an example)

What Can the International Communities Do?

1. Establish A Trilateral Emergency Currency Peg/Stabilization Mechanism
2. Create A Group of Allied Global Central Banks Including Fed, PBOC, and BOJ
3. Recapitalize Key and Viable Global Corporations with Global Sovereign Funds
4. Create Managed Global "Wage & CPI" Growth /Inflation
5. Implement Coordinated Macroeconomic Policies
6. Coordinated Tax Reduction and Public Spending Schemes

1. Establish A Trilateral Emergency Currency Peg/Stabilization Mechanism

The Core Component: Fixed Exchange Rate Regime

- An agreement on an emergency trilateral currency peg among dollar, RMB, and yen at the current level of exchange rate for as long as it is necessary to stop global recession and deflation

Eliminate Exchange Rate Risks and Stop the Temptation of Competitive Devaluation

- With the U.S., China and Japan acting as global leaders, the world can eliminate a large part of the man-made and unnecessary exchange rate risks and politics

The Only Barriers Are Political

- Large amount of foreign exchange reserves held by China and Japan is solid ground for peg of RMB and yen to the dollar
- Support from the U.S. is critical, and strong leadership by the U.S. new administration could help to overcome the political barriers

2. Create A Group of Allied Global Central Banks Including Fed, PBOC, and BOJ

First Step: RMB and Yen As International Reserve Currencies

– Help from the U.S. is crucial in establishing the RMB and yen as international reserve currencies

Second Step: Establish Currency Swaps and A Pool of Reserve Funds

– The Fed, PBOC and BOJ establish currency swaps and a pool of reserve funds, large and credible enough to act as the world's lenders of last resort

Third Step: Form a Group of Allied Global Central Banks

– A group of allied global central banks for coordinated leadership in global macroeconomic, regulatory, monitoring and crisis-managing policies and actions

3. Recapitalize Key and Viable Global Corporations with Global Sovereign Funds

A Coordinated Rescue and Recapitalization Plan

– Key players: the group of allied global central banks and their respective governments
– A coordinated plan for immediate and systematic rescue and recapitalization of key global financial and non-financial corporations
– A mixture of liquidity provision and partial nationalization or recapitalization schemes through sovereign funds

The Role of Sovereign Funds

– Passive minority shareholders
– The goal: to restore public confidence in the markets
– A successful example: Hong Kong government’s intervention during the 1997-1998 Asian Financial Crisis

4. Create Managed Global “Wage & CPI” Growth/Inflation

A Worldwide, Managed, Smooth, and Single-Digit “Wage & CPI” Growth/Inflation

- A coordinated strategy set by the group of allied global central banks
- The “Wage & CPI” Growth/Inflation lasts as long as it is necessary to pull the global economy out of the current Great “Triangular Debt” Crisis

Goals of Managed “Wage & CPI” Growth/Inflation

- Encourage current consumption and investment, boost future prices of property and financial assets
- Lighten the burden of the gigantic public and private “triangular debts”. No matter how large the current public and private debts become, as long as they are a fixed amount, they will become bearable after one or a few decades if the world can maintain a stable inflation rate between 5% and 10%

5. Implement Coordinated Macroeconomic Policies

Joint Announcement of Minimum Targets of "Wage & CPI" Growth/Inflation by The Group of Allied Central Banks

- A coordinated strategy set by the group of allied global central banks.
- Form stable inflation expectations to protect the households and corporations so that they can operate productively under the future global environment of "wage & CPI" growth/inflation

Incorporation of Safeguards Is Necessary

- Without the timely upward adjustment of the nominal interest rate to offset the inflation rate, the inflationary policy will lead to a negative real interest rate, which, sooner or later, will create new asset bubbles
- The "wage & CPI" growth/inflation policy should incorporate safeguards at the start so as to minimize the volatility of future business cycles

6. Coordinated Tax Reduction and Public Spending Schemes

To Jump-Start the Economic Recovery and Employment Engine

– Current high unemployment rates are major obstacles to generate "wage & CPI" growth/inflation , therefore large fiscal stimulation packages are necessary to jump-start major economies
– Such packages could include drastic tax cuts and public spending, until "wage & CPI" growth/inflation reaches 5% to 10%

Policy Options

– Implementation of nominal income-enhancing policies such as temporary subsidies on individual payments to social welfare and retirement funds, and temporary waivers or reductions in taxes
– Governments could in principle double nominal wages by matching wages in the private sector
– Investment in major infrastructure projects that will benefit future generations to put to work most of the unemployed workers

Thank You!