Enhancing Risk Management and Governance in the Region's Banking System to Implement Basel II and to Meet Contemporary Risks and Challenges Arising from the Global Banking System

Training Program ~ 8 – 12 December 2008
SHANGHAI, CHINA

Session 9.1

China's Approaches to Reserve Management

Mr Wei Benhua
People's Bank of China

China's Approaches to Reserve Management

Mr Wei Benhua
People's Bank of China

Management of Foreign Exchange Reserves

1, The Definition of International Reserves
2, The Functions of Foreign Exchange
3, Global Foreign Exchange Reserves
4, Management of Foreign Exchange Reserves
5, The Proper Scales of Foreign Exchange
6, The Formation of China's Foreign Exchange Reserves
7, Sovereign Wealth Fund
8, Gold

1,The Definition of International Reserve

IMF defined the term in 1993 in the version 5 of Handbook of International Balance of payments, that the international reserve of a nation is the foreign assets effectively controlled by the given nation, which could be divided as reserve assets and other official foreign exchange assets. As reserve assets, it is controlled by the monetary authority in order to adjust the imbalance through intervening foreign exchange market, or influence the exchange rate to indirectly adjust the imbalance scale of international balances of payments, as well as serving other purposes.

International reserves : 1, Foreign Exchange Reserves
2, Gold
3, Special Drawing Rights
4, Other Assets

2,The Functions of Foreign Reserves

The definition by IMF in 2004:

1, to support currency policy and foreign exchange management policy

2, to support the need of a government's payment to external debts and its use of foreign reserve

3, provide confidence for the domestic currency

4, provide market confidence for a nation's payment to external debts

5, reduce the external vulnerability of a nation's economy through absorbing the impacts of currency crisis

6, to deal with disasters and emergencies

Global Foreign Reserves

Foreign Exchange at the end of June, 2008 in Hundred Million USD

	Balance	Percentage	Compared to last year
Global	71 128	100%	13 263
America	6 200	8.7%	1 262
Asia-Pacific	43 670	61.4%	7 536
Europe & Mid-Asia	14 426	20.3%	2 816
Middle East and Africa	6 833	9.6%	1 653

The Big Ten Reserve Nations and Regions

(in hundred million USD, end of June,2008)

China	18 088
Japan	9 801
Russia	5 554
India	3 035
Taiwan	2 922
South Korea	2 581
Brazil	1 999
Singapore	1 767
Hong Kong	1 576
Algeria	1 337

China's Foreign Reserve in Chronic Order

(in hundred million USD)

1978	1.67
1988	33.72
1998	1449.59
2000	1655.74
2001	2121.65
2002	2864.07
2003	4032.51
2004	6099.32
2005	8188.72
2006	10663.44
2007	15282.49
September 2008	19055.85

4,The Management of Foreign Reserve

- Principles that need to follow:
  - liquidity, security, profitability
- Managed by MOF:
  - Japan
- Managed by Central Bank:
  - China, France, Singapore
- Sovereign Wealth Fund:
  - GIC
  - CIC China Investment Corporation
  - KIC Korean Investment Corporation

Models of Management

1, Self Management

2, Entrusted to external fund managers

3, Combination of the Two

Currency Structures of Foreign Reserves

- Determining Factors:
  - Currencies of foreign trade
  - Currencies for external debts payment
  - The trends of different currency exchange rate movements
  - Diversifying risks

Investment Portfolio Benchmark

- Libor
- Government Bonds:
  - Developed nations & Developing nations
- Institutional Bonds
- Corporate Bonds
- Stock Market
- Commodities
- Other Investment: PE & HF

Risk Management

- The aim of risk management
- The definition of risk management
  - Credit Risk
  - Market Risk
  - Liquidity Risk
  - Settlement Risk
  - Operational Risk
  - Sovereignty Risk
  - Political Risk
  - Legal Risk

The Aims of Risk Management

Under the general objective of managing the reserve with the principal of security, liquidity and profitability, correctly define and evaluate the risks and levels that reserve management is about to face and undertake, and through effective organizations and measures to manage risks, and to enhance the value of reserve assets under controllable risks.

Credit Risk includes:

Investment Objects

- this is referred to the loss of interests and principals to the reserve investment due to the collapse or default of issuer, and the loss of capital realization due to the deterioration of bond issuer's credit levels. In the case of a nation, this is referred to Sovereign risk

Risk of Transaction Counterparts

- this is referred to the loss due to the bankruptcy or nonfulfillment of contracts of the counterparts

Risk that involves corresponding institutions

- this is referred to the loss caused by the bankruptcy or nonfuifillment of contract by corresponding banks, entrusted management institution, and bond custodian banks

Market Risk:

- this is referred to the market price change caused by interest rate and exchange rate market. Now it mainly includes: core assets income is lower than the investment benchmark income, and risk of losses in tradable assets

Liquidity Risk:

- this is referred to the unprompted realization of reserve assets or risk of realization of value lower than the normal value

Settlement Risk:

- this is referred to the risk that money cannot be received by the agreed time or cannot be received according to agreed terms

Operational Risk:

- this is referred to the losses caused by man-made mistakes, system failure, and mistakes of internal control

Sovereign Risk:

- this is referred to the risk of losses caused by policy changes of the country, includes:
  - 1, the losses caused by bond issuing nation's declining will or ability to pay
  - 2, the losses caused by nonfulfillment of the transaction due to the policy changes of the country where you make investments. Consequently your counterparts and other institutions involved could not observe the contracted as they committed

Political Risk:

- the risk of reserve assets being frozen, confiscated, or controlled by a hostile nation

Juristic Risk:

- the losses caused by improper implementation, or the ineffective enforcement of law terms

To Diversify Investment— Decrease Risks and Increase Income

- Invest in various Currencies
- Invest in various financial products—to enter new investment areas:
  - Stock
  - Commodities
  - PE
  - HF
- To enter emerging economies:
  - Global Bond in hard currencies
  - Domestic Bond in local currency
  - Stock market

5,The Proper Scale of Foreign Reserve

- Traditional Standards:

  The foreign reserves needed for 3-month imports

  Payment for interests and principal (including 1-year short term debt capital)

- The lessons of Asia Financial Crisis: The fixed exchange rate of currency cannot be maintained, Central Banks is not able to continue to intervene, exchange rate depreciate quickly at a large scale, foreign investors pull-back their investments, outburst of crisis.

The Current Situation in China

- Foreign reserves needed for 3-month import
- Import (from January to October 2008, import is about one trillion USD)
- FDI (Use foreign investment up to USD 81 billion from January to October,2008)
- Foreign Debts (Outstanding amount at the end of June 2008 is USD 427.4 billion)
- QFII & QDII
- To maintain the stability of financial system: reform of Agricultural Bank USD 19 billion
- FDI profits
- Reform of exchange rate system
- Cooperation in international financial area (join IDB)
- Regional financial Cooperation
- Sustainable economic development need buying resources and energies
- For emergency use (politics, military, individual purchase of foreign currency up to USD 50,000)

FDI

(in hundred million USD)

YEAR	Use of Foreign Investment
1979-1982	18
1990	35
2000	407
2005	724
2006	727
2007	835
October 2008	811

The Formation of China's Foreign Exchange Reserves

- 1994 Integration of exchange rates, Compulsive Exchange Surrender System
  - Based on Market needs, sole and managed floating system
- 1996 RMB is convertible under current account
  - Capital account become gradually and partially opened
  - Floating band of exchange rate at 0.3%
- 1997 During the Asia Financial Crisis, RMB didn't adopt a policy to depreciate
- 21 July, 2005 Reformed the RMB exchange rate regime, established a floating exchange rate system based on market needs, with reference to a basket currency to adjust. RMB appreciate for 2%, from 8.28 to 8.11. Principles for reform: Initiative, controllable, and gradual
- 2006- Initiating the reform of foreign exchange compulsive surrender system to a surrender system based at your own will
- 21 May, 2007 The floating band of RMB enhance to 0.5%

The Impact for RMB Appreciation

Positive Impact	Negative Impact
Good for imports Firms that rely on raw material import can reduce costs Domestic firms have better ability to invest outwards Good for people to go aboard Reduced pressure on interest and principle payment of external debts Better GDP position internationally Better purchase power for citizens	More basic money injected in to the economy, greater pressure for inflation Decreased attraction for FDI Pressure for China's exports Appreciation will add more burdens on Chinese firms' profits, thus adding pressure for employment.

Exchange Rate for RMB

year	1949	1950/3	1951/3	1951/7	Average exchange rate after 1952	1953-54	1955-71	1972
rate	80	4200	22380	3.5	2.26	2.61	2.46	2.24
year	1973	1974	1975	1976	1977	1978	1979	1980
rate	1.99	1.96	1.86	1.94	1.86	1.68	1.55	1.5
year	1981	1982	1983	1984	1985	1986	1987-88	1989
rate	1.71	1.89	1.96	2.33	2.94	3.45	3.72	3.76
year	1990	1991	1992	1993	1994	1995	1996	1997
rate	4.78	5.32	5.51	5.76	8.62	8.35	8.31	8.29
year	1998 /4	2005	2006	2007	2008 January to October			
rate	8.28	8.19	7.97	7.60	6.9682			

Sovereign Wealth Fund

Definition

- The investment fund of foreign reserve and fiscal surplus owned by government for management and operation

SWF

- More than 40 nations now own 50-plus SWF, 8 of which have the scales more than 100 billion USD. The Abu Dhabi Investment Bureau of the United Arab Emirates is the biggest, managing 900 billion USD. 75% of SWF is owned by oil and gas exporting nations. According to IMF estimation, the overall amount of SWF is 3 trillion USD, which is equivalent to half of the world’s foreign reserves, and twice the scale of the hedge funds in the world.

SWF Classification According to Functions

- Fund of Functioning on stability of the reserve value
  - This kind of fund is applied to avoid the economic and financial imbalance caused by price fluctuation of commodities (especially oil)
- Savings Fund
  - This kind of fund can transfer irrecyclable resources in to multiple assets combination, thus realizing the national wealth consisting of assets of different nature. So the over-dependence of economy on natural resources can be dissipated.
- Reserve Investment Corporation
  - The main aim of this fund is to maintain and add value. The assets are still counted as the official foreign reserve.
- Development Fund
  - The aim of this fund is to serve the implementations of social economic development or industrial policies, and to enhance the potential productivity of the country.
- Pension Welfare Fund
  - This kind of fund is to tackle contingencies or emergencies in which government pension funds are short of supply.

- The Investment Model of SWF:
  - Kuwait: real estate 34%, stock 38%, FDI 17%
  - Norway: stock 60%, fixed income products 40%

- SWF Operation and Management:
  - Self-management: Norway, Abu Dhabi, Singapore
  - Entrustment: South Korea entrusts ¾ of its 20 billion USD to professional institution

The Concerns of International Community

- National security being threatened
- Western market economy being distorted
- Core competition capacity being undermined
- Stability of financial market being attacked
- Deteriorating imbalance of global economy

Measures Taken by International Community

- Implement investment protection measures (in the case of Germany)
- Increase transparency, make SWF operational rules and practices.
- Add pressure on SWF nations to open markets

Assets of SWF

	Name of the Fund	Assets (in hundred million $)
Oil and Natural Gas Exporting Nations		
United Arab Emirates	Abu Dhabi Investment Bureau	8750
Norway	Government Pension Fund Global	3800
Saudi Arabia	Not specified	2890
Kuwait	Government Reserve Fund	2130
Russia	Reserve Fund, National Welfare Fund	1250/ 320
Libya	Libya Investment Corporation	500
Qatar	National Reserve Fund, Stable Fund	500
Algeria	Reserve Fund, Reserve Management Fund	430
USA (Alaska)	Alaska Permanent Reserve Fund	400
Brunei	Brunei Investment Agency	300
Kazakhstan	National Fund	210

	Name of the Fund	Assets (in hundred million $)
Malaysia	Khazanah Nasional BHD	190
Canada	Alberta Heritage Fund	160
Nigeria	Surplus Oil Account	110
Iran	Oil Stability Fund	90
Azerbaijan	National Oil Fund	25
Omen	SGRF	20
East Timor	East Timor Oil Fund	14
Venezuela	FIEM	8
Trinidad and Tobago	Reserve Stability Fund	5
Asia Exporting Nations or regions		
Singapore	GIC	3300
China	CIC	2000
Singapore	Temasek Holding	1080

	Name of the Fund	Assets (in hundred million $)
South Korea	Korea Investment Corporation	300
Taiwan Province of China	National Stability Fund	150
Other nations		
Australia	AGFF	540
Chile	Economic and Social Stability Fund	149 15
Botswana	Pula Fund	47
Kiribati	RERF	4
Total Scale		29, 680

Source: IMF Estimated by the statistics up to February 2008

Gold

- **The importance of gold**
  - Commodity Nature
  - Currency Nature (Means of payment, Bretton Woods System gold standard)
- **Scarcity of gold**
  - Ever since Human discovered gold 4000 years ago, up to 171, 00 0 ton of gold has been produced. Among them,161, 000 ton is in the hands of the people. The rest of 10,000 ton of gold is kept in sunken ships under sea or cached somewhere, but it would never disappear. If we calculate the value of the gold on a basis of 900 USD per ounce, 171, 000 ton of gold amounts to 5.4 trillion USD.

Production and Consumption of Gold

Unit : In tons

Year	2000	2001	2002	2003	2004	2005	2006	2007
Supply (Mineral production)	2618	2645	2618	2621	2493	2548	2486	2476
Demands (Jewelries and Manufacturing)	3761	3482	3141	2997	3168	3287	2932	3072

The Biggest 10 Gold Production Nations for 2007

Unit: In tons

- China 280.5
- South Africa 270.0
- Australia 246.3
- USA 239.5
- Peru 169.6
- Russia 169.2
- Indonesia 146.7
- Canada 101.2
- Uzbekistan 75.3
- Ghana 75.1

The Biggest 10 Consumption Nations of Gold Jewelries for 2007

Unit : In tons

- India 555.1
- China 302.2
- USA 260.9
- Turkey 188.1
- Saudi Arabia 117.9
- The United Arab Emirates 99.8
- Russia 82.0
- Egypt 67.3
- Italy 58.8
- Indonesia 55.2

The Biggest 10 Consumption Nations of Gold for Electronic Uses for 2007

In tons

- Japan 128.4
- USA 50.2
- South Korea 35.6
- Singapore 18.3
- Taiwan Province of China 18.1
- Germany 15.1
- China 12.7
- Russia 12.6
- Switzerland 9.1
- India 2.5

Gold Price and Costs

Gold Price (yearly average: USD/ounce)			
Year	2005	2006	2007
Price	444	604	695
Cost for Gold Production (yearly average: USD/ounce)			
Year	2005	2006	2007
Cost	269	317	395

The 10 Biggest Gold Reserve Nations

	Quantity (in ton)	Gold as percentage to total foreign reserve
USA	8, 133	78%
Germany	3, 417	68%
IMF	3, 217	
France	2, 562	59%
Italy	2, 452	68%
Switzerland	1, 101	40%
Japan	765	2.1%
Netherlands	621	61%
China	600	1%
Central Bank of EU	564	25%

Gold Resource in China

- The gold resource in China is between 15,000-20,000 tons
- Exploitable gold reserve 4634 tons
  - Rock Gold: 2,786 tons
  - Sand Gold: 593 tons
  - Accompanied Gold: 1,255 tons
- In recent years, a big gold mine is discovered in Yangshan, Jiangsu province. The total amount is 308 tons, which changed the history that China did not have any independent gold mine up to 200 tons.

Gold Standard and the Collapse of Bretton Woods System

- 1833-1923 gold price roughly kept at 20.65 USD/ounce
- 1923-1968 gold price roughly kept at 35 USD/ounce
- August 1971 President Nixon announced that the operation for exchanging USD to gold at $35/ounce is terminated, which meant that the Bretton Woods System collapsed. Gold price increased to 38 USD/ounce
- February 1973 gold price increased to 42.22 USD/ounce
- January 1976 the Jamaica Agreement declares that countries no longer peg their currencies to gold. The process for non-currency gold hereby began.
- 18th January 1980 gold price reached to 850 USD/ounce
- In the beginning of 2001 gold price reduced to 255.95USD/ounce

Reasons for Gold Price Increases

- Depreciation of USD
- Uncertainty of World Economy
- Instability of Geopolitics
- High price of Petroleum and other commodities
- Demand-Supply relations
- Pressures of Inflation

The Gold Market in China

- April 2001 Abolishing State monopoly for purchase and distribution of gold
- October 2002, Shanghai Gold Exchange was established, which meant the establishment of Chinese gold market
- January 2008 Shanghai Commodity Future Exchange opened business for gold futures trading

Shanghai Gold Exchange		
	Volume of Business	Trading Volume
2007	1, 828 tons	316.4 billion RMB
2008 Jan.-June.	1, 960 tons	408.8 billion RMB
Shanghai Commodity Future Exchange		
	Volume of Business (Monthly Average)	Trading Volume
2008 Jan.-June.	260 tons	721.5 billion RMB

Chinese Gold Market

- The Visible Market:
  - Shanghai Gold Exchange (gold spot trading)
  - Shanghai Commodity Future Exchange (futures trading)
- OTC Market:
  - Gold bar Trading by commercial banks
  - Gold account trading at commercial banks (paper gold)
  - Gold rent in commercial banks
  - Margin trade for gold
  - Non-standard gold trade between gold-producing and gold consuming enterprises

The Problems and Challenges that China's Gold Market Faces

- The blurring authority for gold supervision
  Although PBOC is authorized to be the gold supervisor.
- Absence of regulatory laws for the gold market (the cases of Shanghai Liantai, and Gaode)
- The standard of gold investment products is not well established in OTC market.
- Too many brokerage companies engaged in gold investment or consulting.

Policy Objectives for China's Gold Market Development

- Transformation of gold market from commodity trading to financial trading
- Transformation from merchandise trading to derivatives trading
- Transformation from domestic market to international market

Thank You!