

## Evolution of China's Financial System

- Before 1983
  - Monobank: People's Bank of China (PBOC)
  - Both the Central Bank and commercial bank
  - Subordinated to the Ministry of Finance
- After 1983
  - PBOC becomes the Central Bank
  - Four state-run "specialized banks"
    - Industrial and Commercial Bank of China (ICBC)
    - Agriculture Bank of China (ABC)
    - Bank of China (BoC)
    - China Construction Bank (CCB)
  - Urban and Rural Credit Cooperatives

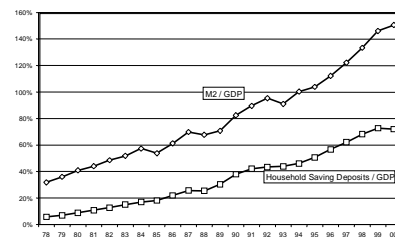
## Evolution of China's Financial System

- In the 1990s
  - Two stock markets opened
  - Three policy banks established
    - State Development Bank
    - Export-Import Bank
    - Agriculture Development Bank
  - Central Bank Law and Commercial Bank Law passed
  - PBOC reorganization: large region branch bank
  - Credit plan abolished
  - More banks established, but the big four continues to dominate

## Financial Deepening

- Concept of Money
  - $M_0$  = Cash in circulation (narrow money)
  - $M_1$  = Cash + demand deposit
  - $M_2$  = Cash + all demand deposit + all time deposit (broad money)
  - Household Bank Deposits (household demand deposits + household time deposits)
- Financial deepening
  - Increase of financial assets as share of GDP
  - 2001: household savings deposits surpassed 7 trillion yuan, greater than 70% of GDP
  - In comparison, household holdings of publicly traded stocks only around 1 trillion yuan

## Trends of Financial Deepening



## Direct vs. Indirect Financing

- Direct financing
  - investors (households) → securities market → projects (firms)
- Indirect financing
  - investors (households) → banks → projects (firms)

## Financial Instruments

- Debt: fixed payment obligations
  - Bonds in securities market (government bonds, municipality bonds, corporate bonds)
  - Bank deposits, bank loans
  - Maturity mismatch problem
- Equity: no fixed payment obligations
  - Shares in stock market

### The Banking System

- The most important part of China's financial system
- The banking system is dominated by the "big four"
- State banks are state-owned enterprises, subject to more government intervention
- Banks are special financial intermediaries with liquidity provision function
  - Trust investment or investment firms are financial intermediaries without that function
- Deposit side: very impressive and successful
- Lending side: very problematic and fragile

### The Deposit Side

- Vast deposit facilities all over China
- Chinese households trust state banks for safety
- Why?
  - State banks never collapsed before
  - Inflation was generally moderate, only two brief periods had annualized inflation rates above 10%
  - Real interest rates on deposits are generally positive
  - In these periods (1988 and 1993), bank deposit rates were indexed to inflation to prevent real rates from falling below zero ("value preserving savings" or *baozhi chuxu*)
  - "Anonymous household banking" (until April 2000) to protect depositors' privacy

### The Non-Performing Loan (NPL) Problem

- The stock vs. flow problem
- How large is the stock of non-performing loans?
  - Hard to estimate
    - In state banks
    - Some transferred to assets management companies
    - In credit cooperatives
  - 30-40% of total outstanding loans, very high by international standard (some can be recovered)
  - Because outstanding loans to GDP ratio is very high, non-performance loans to GDP ratio is extremely high (1/4 of GDP means 2.5 trillion yuan or 300 billion US\$)

### The Non-Performing Loan Problem

- China's difference (as compared with other East Asian countries experience financial crisis)
  - Banks are state owned
  - All deposits are implicitly insured by the state
  - No possibility of bankruptcy, very low possibility of bank run, because the central bank can always step in
  - Bad loans are essentially government public debts
  - Capital control (domestic financial instruments insulated from international financial instruments)
  - The real questions are
    - How large is public debt?
    - Consequences of foreign bank entering the banking sector

### Financial Regulation in China

- Three separating government regulatory agencies
  - China Banking Regulatory Commission: banking industry regulation
  - China Securities Regulatory Commission: securities markets regulation
  - China Insurance Regulatory Commission: insurance industry regulation

### The Capital Adequacy Problem

- The Basle standard: 8% (the share of own capital in total assets)
- Balance sheets of banks
 

Assets	Liabilities
Own capital	Deposits
Outstanding loans	Equity
Provisions	
Reserves with PBOC	
- Steps of re-capitalization of banks to improve balance sheets

### Asset Management Companies (AMCs)

- Four AMCs were created (one for each big four bank) in 1998 and 1999
- Bad loans (prior to 1996) were transferred from banks to AMCs at book value (1.4 trillion yuan, or 17% of 1999 GDP)
- U.S. created “Resolution Trust Corporation” (RTC) to solve Savings and Loans (S&L) crisis in the 1980s (a loss of US\$500 billion)

### Asset Management Companies (AMCs)

- What do AMCs do?
  - Sell them to a third party such as foreign investment and asset management companies
    - Disposed 182.7 billion yuan
    - Recovered 46.2 billion yuan (recovery rate: 25%)
  - Debt-equity swaps: AMCs converted the debt into equity stakes in the debtor SOEs
    - Reduced leverage ratio of SOEs (debt to equity ratio)
    - Sell the equity to buyers
- The costs are borne by the Ministry of Finance, and ultimately by tax payers

### Capital Injection

- December 2003: injection of US\$45 billion from the foreign reserve to two banks
  - China Construction Bank: \$20 billion
  - Bank of China: \$25 billion
- April 2005: injection of US\$15 billion from the foreign reserves to
  - Industrial and Commercial Bank of China
- The Road to Public Listing

### China Construction Bank (CCB)

- Incorporation
  - September 21, 2004: China Construction Bank Limited
- Foreign strategic investors
  - June 2005: Bank of America bought \$3 billion (about 10% of the shares; P/B=1.15)
  - July 2005: Temasek bought \$1.4 billion (about 5% of the shares)
- IPO in Hong Kong
  - November 27, 2005
  - Raised \$8 billion
  - P/B = 1.96

### Bank of China (BOC)

- Incorporation
  - August 26, 2004: Bank of China Limited
- Foreign strategic investors
  - August 2005: Royal Bank of Scotland bought \$3 billion (about 10% of the shares)
- IPO
  - June 1, 2006 on Hong Kong Stock Exchange: \$11.2 billion
  - July 5, 2006 on Shanghai Stock Exchange: \$2.5 billion

### Industrial and Commercial Bank of China (ICBC)

- Incorporation
  - October 28, 2005: Industrial and Commercial Bank of China Limited
  - Board of Directors formed
- Foreign strategic investors
  - April 2006: Goldman Sachs, Allianz, and American Express bought \$3.76 billion (about 10% of the shares; P/B=1.22)
- IPO
  - Simultaneous listing on Shanghai and Hong Kong stock exchanges, October 27, 2006
  - Largest IPO in the world ever: \$21.9 billion combined, with over-allotment
  - Fourth largest bank by market capitalization after Citigroup, Bank of America and HSBC

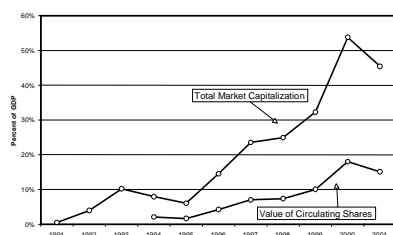
## Examples of Foreign Strategic Investors in Other Chinese Banks

- Bank of Communications
  - HSBC: \$2.225 billion (19.9%)
- Shanghai Pudong Development Bank
  - Citigroup: \$73 million (5%)
- Shenzhen Development Bank
  - Newbridge Capital: \$149 million (17.9%)
- Bank of Beijing
  - ING: \$215 million (19.9%)
- Hangzhou City Commercial Bank
  - Commonwealth Bank of Australia: \$76 million (19.9%)

## Securities Markets

- Starting from trading of government bonds in late 1980s
- Two major stock markets: Shanghai and Shenzhen
- Peculiarities
  - Three classes of shares: state, institutional (legal person), personal
  - Personal: A-share and B-share
  - Only personal shares are circulating
  - Almost all IPOs are former SOEs, the state retains a majority of the equity, not circulating
  - Almost all of the very largest SOEs have been listed
  - Government bonds: most held by institutions, not traded
  - Corporate bonds: very little

## Stock Market Capitalization as Share of GDP



## Stock Market Capitalization as Share of GDP

India 1994	44%
Indonesia 1994	28%
Korea 1994	50%
Philippines 1994	80%
China 1994 All	8%
China 1994 Circulating	2%
China 2001 All	45%
China 2001 Circulating	15%

## Capital Structure (December 31, 2001, percent of total shares)

Total Non-negotiable Shares	65.3%
Of which: Sponsor's Shares	59.8%
State-owned	46.2%
Sponsor/Legal Person	12.7%
Of which: Private Placement of Legal Person Shares	4.7%
Of which: Worker Shares	0.5%
Total Negotiable Shares	34.7%
Of which: A-shares	25.3%
B-shares	3.1%
H-shares	6.4%

## Functioning of China's Stock Market

- Two purposes for developing stock markets
  - Diversify financing channels: Raising funds directly from private investors instead of through banks
  - Diversify ownership structure: Dilute government's shares and to improve corporate governance and control
- Because the state still controls majority shares, the second purpose has not been achieved
- The market is "thin"
  - High P-E ratio
  - High turnover
  - High volatility

### Functioning of China's Stock Market

- Who trades in the market?
  - > 60 million individual accounts
  - Institutional accounts: Securities firms, Trust and Investment Companies, funds management companies (government owned, but managers controlled)
- What do stock prices react to?
  - Not so much fundamentals about the economy and companies
  - Government policy shifts (e.g., reducing state shares, allowing or restricting bank loans to securities firms)
  - Consistent with empirical findings that stock price movements in emerging markets differ from mature stock markets
  - Morck, Randall K.; Bernard Yeung; and Wayne Yu. "The Information Content of Stock Markets: Why Do Emerging Markets Have Synchronous Stock Price Movements?" *Journal of Financial Economics*, 2000.

### Case 1: The Investment Funds Scandal

- 10 (government owned) investment funds management companies by 1999, controlling 31 funds, capital accounts for 11.34% of total A-shares in circulation
- The October 2000 issue of *Caijing Magazine (Business & Finance Review)*
- Violation of regulation
  - Collusions among investment funds and securities firms
  - Stock price manipulation
  - False liquidity

### Case 2: The Guangxia Scandal

- A company traded on Shenzhen Stock Exchange
  - An inland company in Yinchuan, Ningxia (also known as Yinguangxia)
  - a blue chip company
- The August 2001 issue of *Caijing Magazine*, false earnings reports
  - 1999: 0.51 per share
  - 2000: 0.827 per share
- Stock prices
  - Dec. 30, 1999: 13.97
  - April 19, 2000: 35.83
  - Dec. 29, 2000: 75.98
  - Now: 4.8
- The accounting firm (zhongtianqin accounting firm in Shenzhen) suspended