

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

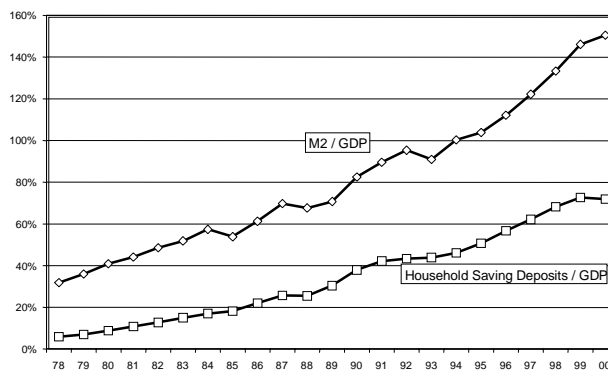
Evolution of China's Financial System

- 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

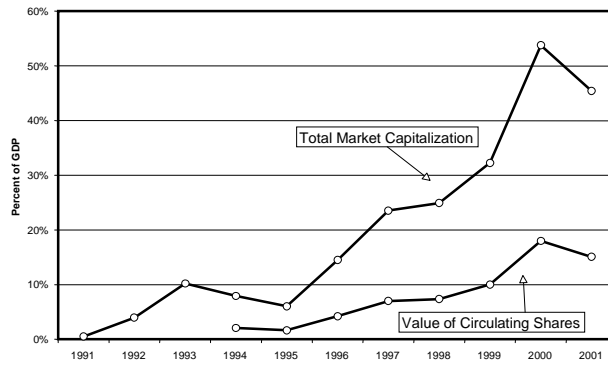
Examples of Foreign Strategic Investors in Other Chinese Banks

- 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