



China's Interest Rate Liberalization Reform

Embarking on interest rate liberalization reforms nearly two decades ago, China has made significant progress in the past few years, but has yet to take the final and most critical step—removing deposit rate ceilings—to reach full interest rate liberalization. China's policymakers have adopted a cautious approach towards the timing and sequencing of the liberalization to minimize disruptions to the stability of the financial system. Despite the slow pace of reform, policymakers have placed a high priority on liberalizing interest rates. Market participants anticipate full liberalization within the next decade to improve the allocation of financial resources and facilitate the rebalancing of the Chinese economy. This *Asia Focus* report explains the importance of interest rate liberalization, reviews historical progress and current efforts that China has made to date, and discusses the potential impacts on the banking sector.

Importance of Interest Rate Liberalization

The use of interest rate controls is a common policy challenge for developing economies including China. International experience suggests that interest rate controls usually lead to inefficient allocation of financial resources. In an inflationary environment, interest rate controls frequently result in near-zero or negative real interest rates. Distorted interest rates serve as a hidden tax on savers and a subsidy for borrowers, which encourage leverage and lead to unproductive use of credit. Not surprisingly, interest rate controls are often associated with high levels of nonperforming loans and frequent recapitalization of banks.¹

The growing global consensus among policymakers is that interest rates need to be determined by market forces. Starting in the late 1970s, a wave of interest rate liberalization reforms swept the developing world. By the mid-2000s, many developing countries had successfully liberalized bank lending and deposit rates.² A liberalized interest rate environment generally leads to more efficient allocation of financial resources, widens credit access for previously underserved sectors (especially small businesses), and promotes more sustainable economic growth. By committing to interest rate liberalization reform, Chinese policymakers hope to ensure that interest rates play a fundamental role in effective resource allocation. Government officials have stressed the importance of allowing banks more autonomy in pricing products and services, providing households with more diversified investment choices, and letting market forces determine risk premiums. In addition, the PBOC expects that interest rate liberalization would facilitate the smooth, effective transmission of monetary policy.³ These expectations are largely in line with the benefits that interest rate liberalization delivered to other countries in the past.

A cautionary note is that in spite of these expected benefits, the actual implementation of such reforms can be fraught with risks to a country's financial system and economy. As Mehran and Laurens (1997) concluded, "interest rate liberalization may not produce the expected benefits if the timing, pace and sequencing are off."⁴ They argue that successful reform often depends on macro-economic and financial stability in countries, conditions of the banking and state enterprise sectors, and central bank capabilities. When implemented too rapidly, interest rate liberalization almost always results in heightened volatility in interest rates and capital outflows and subsequently, bank failures. On the other hand, too slow a pace in implementation may cause new distortions to emerge.

China's Long Road to Interest Rate Liberalization

Table 1 provides a timeline of China's efforts to liberalize its interest rates through the end of 2013. China formally embarked on interest rate liberalization reform in 1996. By 1999, the PBOC had removed all restrictions on money market and bond market rates, allowing interbank lending, central government bonds, and financial institution bonds to be fully priced by the market. These moves paved the way for the deregulation of bank lending and deposit rates in later years.

Upon joining the World Trade Organization in 2001, China committed to opening up the country's financial services sector to foreign competitors in five years. This commitment pressured policymakers to modernize China's financial system and enhance the competitiveness of Chinese banks within that timeframe. Under this context in 2004, the PBOC removed all ceilings on lending rates and all floors on deposit rates and reduced the lending rate floor to 0.9 times the benchmark rates. By taking this important step, the PBOC allowed banks to price counterparty risks on customers within a floating band but kept interest spreads stable. As *Table 1* indicates, the deregulation of lending rates took precedence over that of deposit rates. This approach helps protect banks' profit margins and shields them from a sudden increase in competition in following years.

In 2012, the PBOC lowered the lending rate floor twice to 0.7 times the benchmark rates, and raised the deposit rate ceiling to 1.1 times the benchmark rates. In July 2013, the PBOC further removed all limits on bank lending rates. In October 2013, the PBOC started to publish a prime lending rate based upon the lending rate quotes submitted by nine leading commercial banks. In December 2013, the PBOC allowed the issuance of large

Table 1: A Timeline of China's Interest Rate Liberalization Reform

	Capital market interest rates	Foreign currency lending and deposit interest rates	Renminbi (RMB) lending rates	RMB deposit rates
1996	Interbank offered rate becomes fully market-priced.			
1997	Interbank bond repo rate becomes fully market-priced.			
1998	China Development Bank issues the first market-priced policy bonds.		The PBOC introduces a floating range of lending rates.	
1999	Government bonds are issued through open bid.		Floating range of lending rates is set at (0.9x, 1.1x) for large enterprises, and (0.9x, 1.3x) for SMEs.	
2000		Controls of foreign exchange (FX) deposit rates for large accounts and all FX lending rates are removed.		
2001: China joins WTO and promises to open up capital markets in five years.				
2003		Lower limit of small-account FX deposits rates is removed.		
2004		Upper and lower limits for small-amount FX deposits rate with maturity > 1 year are removed.	Upper limit of lending rates is removed.	Lower limit of deposit rates is removed.
2006			Lower limit of mortgage loan rate is set at 0.85x benchmark.	
December 2006: China fulfills its commitment to opening up capital markets.				
2008			Lower limit of mortgage loan rate is lowered to 0.7x benchmark.	
2008: China enacts a \$580 billion rescue package in response to the global financial crisis 2010-2011: The PBOC raises bank reserve requirement ratios for 12 times.				
2012			Lower limit of lending rate is lowered to 0.8x benchmark in June, then 0.7x benchmark in July.	Upper limit of deposit rates is raised to 1.1x benchmark.
2013			Lower limit of lending rate is removed. Allow nine commercial banks to submit the lending rate they charge their best quality clients each day to set the prime rate. Allow the issuance of large negotiable certificates of deposit on the interbank market.	

Sources: The People's Bank of China, *A Report on the Steady Progress Made on Interest Rate Liberalization Reforms* (January 2005), Laurens, Bernard and Maino, Rodolfo, "China: Strengthening Monetary Policy Implementation," *IMF Working Paper* WP/07/14 (January 2007), and various media reports.

negotiable certificates of deposit on the interbank market. The latest moves represent small yet important steps towards the full liberalization of interest rates.

While the PBOC has not produced an official time table, market participants do not expect the full liberalization of deposit rates to take place in the immediate future. According to a survey conducted by Deloitte in 2012, over half of surveyed financial institutions and senior executives anticipate that China will take another 5-10 years to achieve complete interest rate liberalization.⁵ The survey finding implies that the total time span for China's interest rate liberalization reform could extend well above 20 years, which is among the longest in the world.

This gradual approach reflects policymakers' concerns on banking sector conditions, and goals to minimize negative impacts on China's banking sector and ensure financial market stability. The relatively lengthy process of interest rate liberalization has provided leeway for China's banking sector conditions to improve. Starting in 1999, with substantial government assistance, state-owned Chinese banks unloaded billions of dollars of nonperforming loans stemming from central and local government-directed lending in the early years. Nonperforming loan ratios of the banking sector declined from the double digits in 2004 to less than one

percent in 2012.⁶ After the recapitalization and restructuring, Chinese banks modernized corporate structure, improved risk management, and built a stronger capital base. These changes positioned them to weather potential challenges that the full liberalization of interest rates would entail.

However, this gradualism has its costs. Market participants react to the prolonged interest rate liberalization process by engaging in regulatory arbitrage. In particular, the viral growth of wealth management products in recent years can be viewed as a *de facto* liberalization of bank interest rates outside banks' balance sheets.⁷ Full liberalization of interest rates could be expected to reduce these types of distortions.

Broad-Based Impacts on China's Banking Sector

As international experience suggests, deregulation of interest rates typically leads to higher real interest rate levels, increased interest rate volatility, and narrower interest rate spreads. For the banking sector, this generally translates to higher funding costs, lower profitability, compressed net interest margin, a more competitive operating environment, and potential consolidation within the industry. Indeed, according to a survey conducted by China Banking Association and PricewaterhouseCoopers (PWC) in 2012, Chinese bankers are most concerned that interest rate liberalization would lead to narrower net interest margins and increasing difficulty in pricing products.⁸ Some bankers also indicated that interest rate liberalization would force changes in existing business models, increase fluctuations in interest rates, pose challenges to risk and liquidity management, and intensify competition.

Some of these impacts are already visible in banks' financial statements in recent quarters. Chinese banks continued to post healthy profits in 2012 and 2013. However, as *Figure 1* shows, the pace of profit growth for publicly listed banks clearly slowed after 2012. In addition, publicly listed banks generally observed an increase in average interest rates paid on customer time deposits in 2012 despite the two interest rate cuts during the year, which highlights the growing pressure of funding costs.

Since lending rates were fully liberalized in 2013, the complete removal of the deposit rate ceiling is the only remaining key step of interest rate liberalization.⁹ This ceiling is clearly binding, as evidenced by the higher rate banks are paying on wealth management products. This final move will be equivalent to an asymmetric interest rate hike that will likely further elevate banks' funding costs and tighten interbank liquidity conditions in future years.

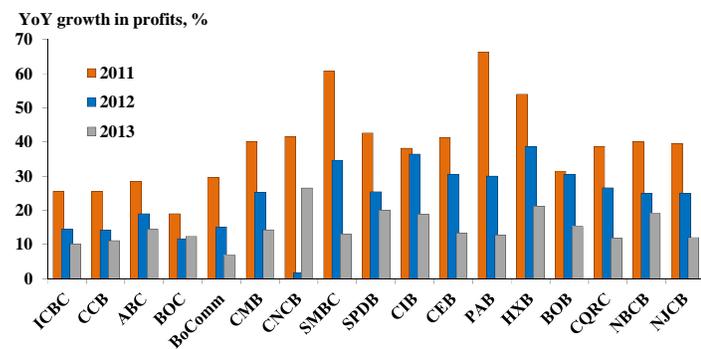
Specific Impacts on Banks of Different Sizes

The impact of interest rate liberalization will vary for Chinese banks based on their asset size, income sources, management strength, and business strategies. In particular, large commercial banks, mid-sized joint-stock commercial banks, and small city and rural commercial banks face different challenges.¹⁰ As of end-2013, the five largest Chinese banks account for more than 40 percent of banking industry assets. While interest rate liberalization will weigh on profitability, large banks likely will face limited negative impacts in a more competitive banking environment. They typically have stable customer relationships with large state-owned or state-controlled enterprises and benefit from economies of scale. Even in a fully liberalized interest environment, large banks may still find it more cost effective to focus on this market segment. In addition, large banks benefit from established stable deposit bases built on solid reputations, which gives them a competitive edge on household deposits. As net providers of liquidity on the interbank market, large banks are also better positioned to deal with tightened liquidity conditions that might be triggered by further liberalization of interest rates.

Small city and rural commercial banks face greater challenges than their larger counterparts from interest rate liberalization. Unlike large banks, city and rural commercial banks are sensitive to funding and liquidity risks, and thus more susceptible to market volatilities. Their limited branch network places them at a disadvantage when competing with large banks for retail deposits. Furthermore, small banks often cater to SME lending. Consequently, their loan portfolios usually carry higher credit risks and are more vulnerable to the business cycle. Due to their close ties with local governments, city commercial banks typically have large exposure to risky local government financing vehicles. These small banks also are generally less sophisticated in their ability to properly price risky loans in a liberalized interest rate environment.

The impact of deregulating interest rates on mid-sized joint-stock banks is somewhat uncertain. Already accustomed to intense competition for deposits, these banks have been proactive in adopting new business models in response to regulatory changes. After the PBOC raised the deposit ceiling in 2012, joint-stock commercial banks reacted swiftly by adjusting short-term deposit rates to match the new ceiling, as shown in *Table 2*. These banks have the potential to gain larger market share in a competitive banking environment due to their more flexible management styles and modern business models. However, some mid-sized banks have become increasingly reliant on wholesale funding, which can carry greater liquidity risk if the interbank market faces heightened volatility.

Figure 1: Net Profits of China's Publicly Listed Commercial Banks



Note: Banks included are: Industrial and Commercial Bank of China (ICBC), China Construction Bank (CCB), Agricultural Bank of China (ABC), Bank of China (BOC), Bank of Communication (BoComm), China Merchants Bank (CMB), China CITIC Bank (CNCB), Minsheng Bank (SMBC), Shanghai Pudong Development Bank (SPDB), Industrial Bank (CIB), China Everbright Bank (CEB), Ping An Bank (PAB), Huaxia Bank (HXB), Bank of Beijing (BOB), Chongqing Rural Commercial Bank (CQRC), Ningbo Commercial Bank (NBCB), and Nanjing Commercial Bank (NJCB).

Sources: SNL, Bank annual reports.

Table 2: Deposit Rates Offered by Chinese Banks as of October 8, 2012

Tenor	Benchmark deposit rates	Deposit rate ceiling	ABC	BOC	CCB	ICBC	BoComm	CGB	CNCB	CMB	CEB	HXB	PAB
Demand deposit	0.35	0.39	■	■	■	■	■	●	●	●	●	●	●
3-month	2.60	2.86	▲	▲	▲	▲	▲	●	●	●	●	●	●
6-month	2.80	3.08	▲	▲	▲	▲	▲	●	●	●	●	●	●
1-year	3.00	3.30	▲	▲	▲	▲	▲	●	●	●	●	●	●
2-year	3.75	4.13	■	■	■	■	■	■	■	■	■	■	■
3-year	4.25	4.68	■	■	■	■	■	■	■	■	■	■	■
5-year	4.75	5.23	■	■	■	■	■	■	■	■	■	■	■

Note: 1. “■” represents benchmark deposit rates; “●” represents deposit rate ceilings; and “▲” represents deposit rates that fall between benchmark rates and ceilings. 2. ABC: Agricultural Bank of China; BOC: Bank of China; CCB: China Construction Bank; ICBC: Industrial Bank of Commercial Bank; BoComm: Bank of Communications; CGB: China Guangfa Bank; CNCB: China CITIC Bank; CMB: China Merchants Bank; CEB: China Everbright Bank; HXB: Huaxia Bank; PAB: Ping An Bank. 3. The survey was conducted by Moody’s in Shenzhen, China on October 8, 2012.

Source: Moody’s Investor Service, “Chinese Banks: Interest Rate Liberalization Brings More Than Interest Rate Risk.” (October 16, 2012)

Chinese banks are actively addressing the challenges posed by the liberalization of interest rates. In their 2012 and 2013 annual reports, publicly listed Chinese banks reported that they are exploring multiple new business lines, such as SME lending, private banking, wealth management, cash management, and e-banking. Many banks indicated that strengthening the ability to price risky loans and wealth management products is a key focus of their strategy in upcoming years. To survive and succeed in a market-based interest rate environment, Chinese banks will need to pass the “market test” of their ability to properly price counterparty risks and manage balance sheets as they embrace new business opportunities and innovative products.

Conclusion

Interest rate liberalization will likely benefit savers, expand access to credit for the private sector, and reward productive use of capital. As a key component of China’s overall economic and financial reform blueprint, interest rate liberalization is now high on the policymakers’ to-do list. Although market participants have great expectations for interest rate liberalization, this policy change alone is not a panacea for China’s structural challenges. Appropriate timing, pace, and sequencing are also crucial factors that will determine if China will be able to reap the full benefit of a market-based interest rate environment while minimizing disruptions to the domestic economy.

Although most economic and financial reforms on Chinese policymakers’ agenda—including interest liberalization reform—will bring long-term benefit to the Chinese economy, they will also put downward pressure on growth and increase financial market volatility in the near run. An imminent challenge for the government is to strike a balance between making progress on these reforms and maintaining stable economic and employment growth. Accordingly, the Chinese government will likely weigh the costs and benefits of various economic and financial reforms on a continuous basis and adjust the pace of interest rate liberalization correspondingly to prevent sudden shocks to the economy and banking sector.

Endnotes

1. For an in-depth discussion on factors behind financial liberalization, including interest rate liberalization, see The World Bank, “Financial Liberalization: What Went Right, What Went Wrong?” Chapter in *Economic Growth in the 1990s: Learning from a Decade of Reform*, April 2005.
2. “A New Database of Financial Reforms” was introduced by several IMF economists in 2008, which covers 91 countries over the 1973-2005 period. According to the database, 74 countries in the sample had fully liberalized lending and deposit rates by 2005, compared to four countries in 1973. Most of the countries completed interest rate liberalization in the 1980s and 1990s. For more information, see Abiad, Abdul, Detragiache, Enrica, and Tressel, Thierry, “A New Database of Financial Reforms,” *IMF Working Paper* WP/08/266, December 2008.
3. For more information on the PBOC’s perspectives on interest rate liberalization, see “Perspectives on Interest Rate Liberalization,” Speech by Governor Zhou Xiaochuan on the 2010 *Caijing* Annual Conference, December 17, 2010. (In Chinese)
4. See Mehran, Hassanali and Laurens, Bernard, “Interest Rates: An Approach to Liberalization,” *Finance & Development*, International Monetary Fund, June 1997. Also see Feyzioglu, Tarhan, Porter, Nathan, and Takáts Előd, “Interest Rate Liberalization in China,” *IMF Working Paper* WP/09/171, August 2009, for a discussion of experience with interest rate liberalization in Nordic countries, the United States, Turkey, and South Korea.
5. For more information, see Deloitte, *The Impacts of China’s Market-Based Interest Rate Reform and Coping Strategies*, May 8, 2013. (In Chinese)
6. NPL ratios started to rebound in 2013. As of year-end 2013, system-wide NPL ratio was 1 percent, slightly up from a low of 0.94% in the second quarter of 2012.
7. For more discussion on wealth management products and related shadow banking issues, see Federal Reserve Bank of San Francisco, “Shadow Banking in China: Expanding Scale, Evolving Structure,” *Asia Focus*, April 2013.
8. For a summary of the survey results, see Liu, Mingkang, “Bank Readiness for Interest Rate Liberalization,” *Fung Global Institute Financial Working Paper*, August 2013.
9. A floor for home mortgage rates is kept in place in order to curb speculative home purchasing and investment.
10. Large commercial banks refer to the five state-controlled commercial banks, namely Industrial and Commercial Bank of China, Agricultural Bank of China, Bank of China, China Construction Bank, and Bank of Communications. Their total assets ranged from RMB 5.9 to 18.9 trillion as of end-2013. The twelve joint-stock banks are mid-sized banks with national or regional operations, including China CITIC Bank, China Everbright Bank, Huaxia Bank, Guangdong Development Bank, Ping An Bank, China Merchants Bank, Shanghai Pudong Development Bank, Industrial Bank, China Minsheng Banking Corporation, Evergrowing Bank, China Zheshang Bank, and Bohai Bank. Their total assets ranged from RMB 488 billion to 4 trillion as of end-2013. With a few exceptions, city and rural commercial banks’ total assets are generally below RMB 500 billion.

Contacts: Walter Yao (walter.yao@sf.frb.org) and Chris Sigur (christopher.sigur@sf.frb.org)

Written by: Cindy Li (cindy.li@sf.frb.org)

