## Banking Deregulation and Macroeconomic Impact in China: A Theoretical Analysis and Implications of WTO Accession to the Mainland and Hong Kong

## April 2002

Zhijun Zhao<sup>a,d</sup>, Yue Ma<sup>b,\*</sup>, Yak-yeow Kueh<sup>b</sup>, Shu-ki Tsang<sup>c</sup>, Matthew S. Yiu<sup>d</sup>, and Shucheng Liu<sup>a,d</sup>

- <sup>a</sup> Economics Institute, Chinese Academy of Social Sciences, Beijing
- <sup>b</sup> Economics Department, Lingnan University, Hong Kong
- <sup>c</sup> Economics Department, Hong Kong Baptist University
- <sup>d</sup> Hong Kong Institute for Monetary Research

## **Summary**

This paper discusses the phenomenon of continuing expanding credit balances in the Chinese banking system during the 1990s, and some important issues faced at present and to arise after China's accession to the World Trade Organization (WTO). To investigate the impact of banking reforms on the Chinese economy, a three-sector equilibrium model that includes the behaviors of consumers, enterprises and banks is built incorporating some of the deregulations in China such as interest rate liberalization and breaking up the monopolistic position of the state-owned banks. Using this model, we can directly carry out not only the analyses of the short-run equilibrium but also of the long-run steady-state as done in some neoclassical models.

Similar to the assumptions of the IS-LM model, this paper obtains the short-run equilibrium conditions of the deposits market and goods market, given the price in the past, the expected price in the future, and other exogenous variables and policies. However, unlike the IS-LM model in which price is assumed to be sticky and the banking sector is implicit, our model assumes that both current interest rate and price of goods are adjusted to clear the markets. The model finds that whilst government expenditure has a positive impact on the price of goods, quantity of investment and future output, it has a negative impact on the interest rate in the short-run. However, the short-run impact of both the reserve requirement ratio and the tax rate are ambiguous.

There are two important theoretical findings from this paper. One is the finding of the so-called D-curve and G-curve, which can be utilized to analyze short-run impacts. The second finding is that the long-run steady-state equilibrium has significant implications with respect to institutional reform as well as long-run economic growth. There are two equilibrium solutions for the long-run steady-state. The first solution indicates that introducing competition to the banking sector will benefit both the consumer sector and the production sector. Increasing the banking competition will lower the real interest rate of lending and will boost GDP, investment, consumption, and deposits, but the monopolistic profits of the banking sector will decrease. The second long-run solution indicates that

increasing competition will cause the real interest rate of deposits to rise and profits of banks to fall. However, all the benefits from increasing competition among banks will go to the consumer sector instead of the production sector.

Comparing the two long-run equilibriums, the first equilibrium is believed to be more acceptable, because it will benefit both consumers and enterprises. Although the model cannot explain all the stylized facts of the Chinese banking system, it can contrast the differences between the traditional system and the market one, and can explain the swing of the credit balances and provide some solutions to the existing problems in the Chinese banking system.

With regard to the challenges of China's entry to the WTO, the findings of our research project have important implications for both the economies of mainland China and Hong Kong. In the Chinese economy, market-oriented banking reform helps to break up the old financial system and to enhance the efficient use of financial resources, and to boost investment, consumption and economic growth. Opening up the banking sector's competition can reduce both inflation and deflation pressure. The expected fall in the monopolistic profits will create pressures on the state-owned banks, although it will also force them to improve their efficiency and skills of financial management through learning-by-doing. In Hong Kong's banking sector, since those banks who go into the mainland market earlier will earn more profits, it is recommended that the concerned institutions in Hong Kong try to go into the mainland market as early as they can. Our analyses indicate that banking sector in Hong Kong will enjoy relatively more opportunities than challenges after China enters the WTO.