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Privatization and optimal share release in the Chinese banking industry[☆]

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ABSTRACT

This paper establishes a mixed oligopoly model to explore how the government determines the percentage of shares of the state-owned banks to be released to foreign investors under the goal of seeking to maximize social welfare. The theoretical model finds that the release of shares of state-owned banks to foreign investors will reduce the outputs of the state-owned banks. The direction of the change in the profitability of the state-owned banks depends on the percentage of the shares released. The direction of the changes in the levels of social welfare also varies. If the gap in production efficiency between the state-owned banks and private banks is not large enough, we can be certain that a partial release of shares is the government's best policy.

1. Introduction

The speeding up of globalization in finance has resulted in a wave of mergers and acquisitions (M&A) among banks. The expansion of operations across countries and sectors has brought competition in financial markets across the boundaries of nations. Impacted by such developments, banks all over the world have been busy making adjustments in order to keep up. In China where the financial system is relatively immature, the banking industry has been constantly engaged in restructuring. The process of banking reform in China is, in effect, a process of privatization.

Such rapid economic development makes banking reforms a necessity for the financial industry in China. Foreign financial institutions have also climbed on the bandwagon, and have rushed into this massive market. These foreign banks provide capital, technology and management experience, and have helped to speed up the development of the financial industry in China (Chen and Shih, 2004). Meanwhile, these foreign banks have also set themselves to gain substantially from this huge market. This win–win situation has been prompting the Chinese government to gradually lift its restrictions on the participation of foreign financial institutions.

In accordance with its accession commitment to the WTO, China fully opened up its Renminbi services to foreign banks before the end of 2006. The experiences of Eastern European countries in terms of financial reform indicate that institutional transformation is the key to success in the liberalization of the financial market, and the legal framework that protects the implementation of contracts is of particular importance (Clarke et al., 2005). Moreover, foreign bank entry has lowered costs in the post-communist transitional economies (Fries et al., 2006).

By the end of September 2006, there were a total of 14 registered financial institutions in China that were either solely foreign-owned or joint-ventures between Chinese and foreign equity owners. These 14 financial institutions comprised a total of 17 branches and affiliate companies in China. Foreign banks have established a total of 191 branches, 61 branch offices and 242 representative offices in 24 cities in China. The total value of deposits with foreign banks in China amounted to US$33.4 billion, with loans amounting to US $54.3 billion.

The focal point of the banking reforms in China, i.e., the introduction of overseas strategic investors to state-owned banks, is an example of

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the partial privatization of state-owned banks whereby international banks hold equity investments in them. Since the 1970s, state-owned enterprises from countries all over the world have been pursuing privatization (Megginson, 2005). The most common method is for a government to sell all or part of its stake to individuals. However, many governments do not sell off all of their stakes during the privatization process, and the selling of all state-owned holdings is indeed rare in the privatization process. The ultimate purpose in privatizing state-owned enterprises is to enhance social welfare.[2] Therefore, there exists a subtle relationship between the optimal percentage of shares released and social welfare.

In recent years, there has been a considerable literature that has dealt with the privatization of state-owned enterprises and social welfare. De Fraja and Delbono (1989) indicated that when state-owned enterprises seek to maximize profits rather than social welfare, the result is improved social welfare. De Fraja (1991) showed that state-owned enterprises aim to maximize social welfare and are less restricted by budgets, and as a result, offer lower prices. For private enterprises in the same industry, state-owned enterprises are formidable competitors. This competitive pressure stimulates private enterprises, and as a result, the efficiency of the industry as a whole increases. Under this scenario, social welfare is in fact superior to that after the completion of privatization. Fjell and Pal (1996) were the first to introduce foreign private enterprises into the mixed oligopoly model in which state-owned enterprises compete with both domestic and foreign private enterprises. They found that if new domestic private enterprises enter the market, social welfare will increase. If new foreign private enterprises enter the market, the change in social welfare depends on whether there are more domestic private enterprises or foreign private enterprises. Pal and White (1998) followed up on Fjell and Pal (1996) and found that, under domestic subsidies, privatization enhances social welfare and reduces the optimal subsidy quotas. Nevertheless, under the implementation of import tariffs, privatization does not necessarily boost social welfare and the impact on the optimal tariffs also varies. However, none of the literature considers the possibility of partial privatization. In actual fact, many governments retain shareholdings in privatized enterprises during the privatization process. Matsumura (1998) discovered that the optimal ratio of the shares of state-owned enterprises released ranged from 0 to 1. In other words, in order to maximize social welfare, governments should strike a balance between complete privatization and the state-ownership of state-owned enterprises. Weng et al. (2003) noticed that the higher the number of domestic enterprises, the higher the optimum level of privatization became. However, the increase in the number of foreign enterprises does not necessarily enhance the level of optimal privatization. Sepahvand and Cornes (2005) showed that privatization improves welfare only if firms are engaged in Cournot competition and argued that adopting a simultaneous play strategy is inconsistent with the firms' preferences over the timing of action and therefore lack credibility. Chiou and Hwang (2006) suggested that only when the operating efficiency of the state-owned enterprises is inferior to that of the domestic private enterprises, will the government privatize state-owned enterprises. Therefore, the higher the number of domestic private enterprises, the higher the optimal level of privatization becomes. Fujiwara (2007) showed that the long run optimal policy is monotonically in the consumer's preference for variety. Brandão and Castro (2007) found that the state-owned firm could be an indirect instrument to regulate entry. Lin (2007) indicated that the optimal degree of privatization has strong relations with market opening and foreign acquisition of domestic private firm. The recent findings of Krumar and Saha (2008) showed that unless the public ownership exceeds a critical level, maximal differentiation continues to hold and social welfare does not improve. In a mixed oligopoly model, Lin and Matsumura (2008) pointed out that an increase in foreign investors' stockholding ratio in a privatized firm causes an increase in the optimal degree of privatization.[3]

One very important issue in the ongoing process of institutional transformation (privatization in particular) in China's banking sector is whether the release of equities to foreign institutions will improve the social welfare.[4] The purpose of this paper is therefore to use the opening up of equity subscriptions to foreign banks in the Chinese banking industry to establish a mixed oligopoly theoretical model. This paper explores the optimal ratio for foreign participation in domestic state-owned banks, when the domestic government seeks to maximize social welfare. The remainder of this paper is organized as follows. The next section describes the development of Chinese banks with foreign equity participation. The establishment of the theoretical model based on a mixed oligopoly then follows. The final section presents the conclusions drawn from this study.

2. The development of Chinese banks with foreign equity participation

Foreign capital has been flowing into the Chinese financial sector following a series of liberalization policies. In addition to the establishment of branches, foreign strategic investors have also made inroads into the Chinese banking landscape. The purpose of such active equity investments by foreign institutions is to leverage the existing business networks already established by Chinese banks and to create excess investment returns. The introduction of foreign capital may potentially bring about the following benefits to Chinese banks:

(1) Improvement of the corporate management structure.
The uniform state-owned equity structure of the state-owned banks in China tends to deviate from commercial tracks, making it difficult to establish sound management and operational mechanisms. The result is an overly high percentage of bad assets and low competitiveness. The introduction of foreign capital helps to improve equity structures and operational mechanisms, and to enhance management standards.

(2) Introduction of technologies and management experience.
Generally speaking, Chinese banks are lagging in terms of technological expertise and management experience. They also suffer from insufficient risk management and internal controls, and this is detrimental to their development. The introduction of foreign capital brings in effective technologies and management expertise to enhance the standards of risk management and internal controls.

(3) Increase in capital adequacy ratios.
Although Chinese banks have attempted several series of reforms, low capital adequacy ratios and bad assets remain a prevalent problem.

[2] Alchian (1965) pointed out that the state-owned firms do have inherently inefficient since the dispersed owners have poor incentives to monitor sate-owned firm activities. Dixit (1997) also indicated that state-owned firms' managers are more likely to have very weak incentives to pursue efficiency since they are asked to serve multiple masters.

[3] Partial privatization was also discussed in a number of papers including: Barcena-Ruiz and Garzon (2003), Chang (2005) and Chao and Yu (2006) and Fujiwara (2006) in the context of international trade, Kato (2006) and Ohori (2006) for environmental issues, Tomaru (2006) for tax and subsidy policies, Matsumura and Kanda (2005) and Lu and Poddar (2007) for product differentiation for merger problem.

[4] In privatization practice, partial state ownership is widespread in both transition economies and in non-transition economies. Partial state ownership as a policy tool was also developed in a number of papers including those of Bös (1986), Sinn and Sinn (1991), Bolton and Roland (1992), Demougin and Sinn (1994), Perotti (1995), Cornelli and Li (1997), Bennett and Maw (2000, 2003), Gouret (2007), and Bennett et al. (2007).