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Foreign participation and banking competition: Evidence from the Indonesian banking industry

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ABSTRACT

Foreign participation in Indonesian banking has expanded from the establishment of foreign *de novo* banks into the acquisition of existing local banks. The increase in foreign participation has therefore not been associated with a growing number of banks. This study aims to examine the competitive behavior of foreign and local banks as a competitive banking industry is important in boosting economic efficiency and economic growth. This study also examines the role of modes of entry of foreign banks on competition, either through the establishment of foreign *de novo* banks or the acquisition of local banks. The recent methodological refinements of the Panzar–Rosse method developed by Bikker et al. (2011) are employed to estimate the level of competition among local and foreign banks. Generally, the foreign banks, particularly foreign *de novo* banks behaved more competitively than local banks, and their penetration is therefore important in creating a contestable market. This study found that in terms of assets, on average foreign *de novo* banks were smaller, more efficient, and had lower overhead costs, so they could offer lower loan rates and disburse more loans. The recent consolidation in the Indonesian banking industry may have an adverse impact on competition as it restricts the establishment of foreign *de novo* banks.

1. Introduction

The Indonesian banking sector is open for foreign investment. The current trend shows that regulatory and policy changes in Indonesian banking have widened the access for foreign penetration into the local market. Currently foreign banks are allowed to acquire established local banks (later these are named foreign acquired banks) and establish joint ventures and branches of foreign banks (these last two modes are later called foreign *de novo* banks). The wider access explains a higher degree of foreign penetration in the Indonesian banking industry. The share of assets of foreign banks in Indonesian banking increased from 10% in 1990s to 35% in 2000s. However, the increased penetration of foreign banks was not associated with a growing number of banks in the industry because in the 2000s foreign banks entered the market by acquiring existing local banks rather than establishing new joint ventures or branches of foreign banks. According to the ownership data, in 2010 more than half of foreign banks were foreign acquired banks and the number of foreign *de novo* banks decreased from 37 in 1998 to 19 in 2010.[1]

There is a significant interest in understanding the competitive behavior of the two types of foreign banks, foreign *de novo* banks and foreign acquired banks, in order to predict the impact of policy changes in favor of banking liberalization on competition. Regarding competition, the literature suggests that different modes of entry of the foreign banks may have different impacts on competition (Berger et al., 2004; Claeys and Hainz, 2006; Clarke et al., 2001; Jeon et al., 2011; Lehner, 2009; Martinez Peria and Mody, 2004; Montgomery, 2003). The study of competitive behavior of banks is important because some empirical studies, for example Jayaratne and Strahan (1996), Levine et al. (2000), and Collender and Shaffer (2003) have found a strong relationship between competitive banking and economic growth. Competitive banking lowers the interest rate on loans compared to less competitive

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[1] Some *de novo* banks exited from the market due to bank closures or merging with other banks.

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banking. Therefore, a competitive banking industry will boost the loans disbursement for investment activities. Further, competition facilitates the emergence of innovations and drives financial institutions to deliver a high quality product. An efficient banking industry will benefit the whole economy through loans provision, payment system delivery, monetary policy transmission and its role in maintaining financial stability (Bikker et al., 2011).

This study has two objectives. The first is to examine the contribution of foreign participation to competition in the Indonesian banking industry. This study estimates and compares the competitive behavior of local banks and foreign banks between 1980 and 2010. Second, this study aims to examine the role of modes of entry of foreign banks, either through the establishment of foreign *de novo* banks or acquisition of local banks (foreign acquired banks), on competition. We examine the competitive behavior of foreign *de novo* banks and foreign acquired banks using the observation period 2000–2010. The recent refinements of the Panzar–Rosse (P–R) method by Bikker et al. (2011) are employed to estimate the level of competition. It is important to employ the correct specification of the Panzar–Rosse method as Bikker et al. (2011) found that the price and scaled-revenue specifications are mis-specified because they cannot distinguish between perfect and imperfect competition. Finally, this article contributes to the study of foreign penetration in local banking, particularly in emerging economies where the capital market is under-developed and the banking sector is the main source of lending.

2. Regulatory changes

The form of foreign participation in the Indonesian banking industry has evolved in the past 30 years. In the 1970s, foreign participation was permitted through establishing branches of foreign banks. In those times, foreign banks had more business restrictions than their local counterparts. For example, in terms of operation the branches of foreign banks were only permitted to operate in the capital city with two offices (Hadad et al., 2004; McLeod, 1999). The banking reform in 1988 granted larger access for foreign banks to penetrate the local banking market by establishing joint venture banks through a partnership with local banks. Unlike branches of foreign banks, joint venture banks are a local legal entity that is separated from the headquarter bank (Hadad et al., 2004). The regulation treats joint venture banks as local banks, and in consequence they do not have any geographical restriction to expanding their business. As the regulation was more lenient, foreign penetration increased gradually. Following the reform, the Indonesian banking industry was further opened for foreign penetration through the introduction of the Banking Law of 1992. The Law permitted the purchase of listed local banks in the stock market by foreigners (Table 1).

The 1997 economic crisis contributed to changes in the nature of foreign penetration in the Indonesian banking industry. After the 1997 crisis, foreign penetration was conducted through the purchase of existing local banks under the divestment program.[2] This program provided larger opportunities to enter Indonesian banking. Furthermore, foreign participation was unlimited because foreign banks could purchase up to 99% of the shares of local banks.[3] Referring to the ownership data for Indonesian banks in 2009, at least seven large banks under the recapitalization program were owned by foreign investors. The shares of foreign investors in those seven large banks were even higher than 50% (Fig. 1).

After the 1997 economic crisis, the Indonesian banking industry has consolidated. During the consolidation in the 2000s, foreign penetration was observed in local banks particularly in small banks and existing joint venture banks. Under consolidation, banks had to meet new capital requirements by 2010. Some small banks invited investors to inject additional capital to meet the new requirements. In addition, the intensity of foreign penetration rose, as the existing foreign partners in joint ventures increased their participation so that they became the main shareholders. The ownership data shows that among the 16 joint ventures, the foreign banks' participation increased substantially up to 99%. Information relating to the ownership structure of banks is available in the appendix.

3. Literature review

3.1. Foreign penetration and competition in local banking

There are substantial numbers of papers discussing the influence of foreign presence in the banking industry. As the focus of this study is Indonesian banking, the discussion of the literature is focused on foreign penetration in developing economies. The behavior of foreign banks in developing countries differs compared to those operated in developed countries. For extensive studies about foreign banks in developing and developed countries, please refer to the study by Claessens et al. (1998). Regarding developing countries, initially most of the studies are concerned with the penetration of foreign banks in Latin American countries, where foreign investment was first observed. Among the studies about foreign banks' penetration in Latin American countries are Barajas et al. (2000), Gelos and Roldos (2002), Yeyati and Micco (2003), Martinez Peria and Mody (2004), Yeyati and Micco (2007), and Jeon et al. (2011).

Most of the studies confirmed that foreign banks' penetration enhances competition in the local banking industry. The new entrants contribute to creating a contestable market by alerting the incumbents to enhance their competitiveness. Contestable market theory was introduced by Baumol (1982) to describe a market where firms have zero profit and sell at a price equal to marginal cost even though firms are working under imperfect competition including monopolistic competition, monopoly and oligopoly. A contestable market exists as long as there are no barriers to entry and exit. The freedom of entry puts pressure on the incumbents to operate at normal profits because any extra profit will attract new entrants.

In addition, as foreign banks operate in local banking, their competitive behavior further exerts pressure on the local banking market. Foreign banks behave more aggressively than local banks due to their smaller size. A study by Claessens et al. (1998) in 80 countries showed that in most of the countries, foreign banks were smaller than local banks. Comparing the shares of foreign banks in terms of number and assets, foreign banks had a higher percentage in terms of number than in terms of size. A study by Bassett and Brady (2002) suggests that small banks behave more aggressively than the larger banks because they are more likely to be highly dependent on interest-based activities compared to the large banks. In the case of Indonesian banks, the contribution of

[2] During the 1997 economic crisis, the government bailed out some banks through the Indonesian Banking Restructuring Agency (IBRA) in order to improve the banks' financial performance. The government contributed 80% of funds required to increase the banks' equity to meet the capital adequacy ratio (CAR) requirement of 4%. The government contribution was then converted into shares of the recapitalized banks. In 2003, under the privatization program, the Indonesian government offered the shares of bailout-banks to the public.

[3] The Banking Law Number 10 of year 1998 permits foreigners, including banks, entities and individuals to have up to 99% of shares in joint venture banks.