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ESSAYS ON INDONESIAN BANKING: COMPETITION, EFFICIENCY, AND ITS ROLE IN MONETARY POLICY TRANSMISSION

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This Thesis Is Submitted For The Degree of Doctor of Philosophy
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Declaration

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Abstract

This thesis investigates competitiveness of banking market in Indonesia and monetary policy transmission during the period 2000 to 2009. As has been the case for most previous structure-performance studies, the results using the SCP specification are not very robust. When PR approach is used, as done in other studies, it reveals much evidence of imperfect competition in Indonesian provincial markets. The estimated values of H-statistics for the sample period 2001-2008 are positive ranging between 0.31 - 0.62 which is consistent with the study by Claessens and Laeven (2004). We find that the market in Java and Sumatra is more competitive than metropolitan and the periphery. H-statistic of metropolitan and the periphery are 0.31 and 0.52 respectively while Java and Sumatra is 0.62. However, the weakness of PR modeling is that it does not tell us much about the sources of imperfect competition, what can be done to change matters. The estimation using ES hypothesis specification does not also reveal significant influence of the geography of Indonesia. Although there is a modest impact of the geography of Indonesia on the level of competition, the development that help overcome geographical barriers, e.g. new banking technologies can usefully promote competition in Indonesian deposit markets.

In measuring the efficiency of the Indonesian banks, we find that the mean of cost-efficiency was in the range of 40%-50%. State-owned banks were found to be relatively more cost-efficient than foreign banks. The analysis suggests several conclusions about banking efficiency in Indonesia. Firstly, foreign ownership has positive effect on improved cost efficiency of the banks. However, the changing effect is small. Secondly, it appears that although old foreign banks are able to maintain comparable efficiency to the new acquired foreign banks, old foreign banks’ efficiency tend to worsen. They need to hire more skilled workers and install better working environments. 

Finally the result of the role of banks in monetary policy in Indonesia shows that there is an operative lending channel in Indonesia. We also find evidence that large banks are more responsive, while high liquidity and high capitalization banks are less responsive to the changes in monetary policy.
## Abbreviations

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<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>ARDL</td>
<td>autoregressive distributed lag</td>
</tr>
<tr>
<td>BI</td>
<td>Bank Indonesia</td>
</tr>
<tr>
<td>BPD</td>
<td>Bank Pembangunan Daerah (Regional/Provincial Development Bank)</td>
</tr>
<tr>
<td>BIS</td>
<td>Bank for International Settlements</td>
</tr>
<tr>
<td>bn</td>
<td>billion</td>
</tr>
<tr>
<td>BUMN</td>
<td>Badan Usaha Milik Negara (state owned enterprise)</td>
</tr>
<tr>
<td>CAMEL</td>
<td>Capital adequacy, Asset Quality, Management, Earnings, and Liquidity</td>
</tr>
<tr>
<td>CEE</td>
<td>Central Eastern Europe</td>
</tr>
<tr>
<td>CIA</td>
<td>Central Intelligence Agency’s</td>
</tr>
<tr>
<td>CBI</td>
<td>certificate of Bank Indonesia (Bank Indonesia’s bills)</td>
</tr>
<tr>
<td>CR3</td>
<td>concentration ratio of top three banks</td>
</tr>
<tr>
<td>DEA</td>
<td>data envelopment analysis</td>
</tr>
<tr>
<td>DFA</td>
<td>distribution free approach</td>
</tr>
<tr>
<td>DIAI</td>
<td>Deposit Insurance Agency of Indonesia (LPS)</td>
</tr>
<tr>
<td>ES</td>
<td>efficient-structure hypothesis</td>
</tr>
<tr>
<td>ESS</td>
<td>efficient-structure hypothesis using scale efficiency</td>
</tr>
<tr>
<td>ESX</td>
<td>efficient-structure hypothesis using X-efficiency</td>
</tr>
<tr>
<td>FASBI</td>
<td>Fasilitas Bank Indonesia (deposit facility given by Bank Indonesia for banks with excess funds).</td>
</tr>
<tr>
<td>FDH</td>
<td>free distribution Hull</td>
</tr>
<tr>
<td>GCG</td>
<td>Good Corporate Governance</td>
</tr>
<tr>
<td>GDP</td>
<td>gross domestic product</td>
</tr>
<tr>
<td>GMM</td>
<td>generalized method of moment</td>
</tr>
<tr>
<td>HHI</td>
<td>Herfindahl-Hirschman Index</td>
</tr>
<tr>
<td>IBA</td>
<td>Indonesia Banking Architecture</td>
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</tbody>
</table>
IBRA  Indonesian Bank Restructuring Agency (BPPN)
IMF  International Monetary Fund
IT  inflation targeting
M&As  mergers and acquisitions
MC  monopolistic competition
MENA  Middle-east and north Africa
MMDA  money-market deposit accounts
MP  market power
MSA  metropolitan statistical areas
MSME  micro small and medium enterprise
NPL  non-performing loans
NEIO  new empirical industrial organization
OMOs  open market operations
PC  perfect competition
PR  Panzar and Rosse
RMP  relative market power hypothesis
ROE  return on equity
ROA  return on assets
SAMC  State-owned Asset Management Company (PPA)
SFA  stochastic frontier approach
SCP  structure conduct performance
SME  small medium enterprises
SPP  single presence policy
TE  transition economies
TFA  thick frontier approach
US  the United States
USD  US Dollar
VAR  vector autoregressive
VRT  variable rate tender
y-o-y  year-on-year