Alessa Maria Christina Lux

Chinese, Japanese, and South Korean Banking Sectors and Bank Performances: All the Same or Different? – A Qualitative and Quantitative Analysis from 2011-2016

Topic and Research Question

Due to the great influence banks can have on nations, corporations, and individuals (see, for example, the effects of the Asian Financial Crisis or the Global Financial Crisis of 2007-2008), the aim of this thesis is to analyze the Chinese, Japanese, and South Korean banking sectors. To answer the research question *"What are similarities and differences of the banking environments and the banking sector performances of China, Japan, and South Korea after the Global Financial Crisis, covering the period from 2011 to 2016?"* an eclectic framework is used. It consists of two analyses:

- Analysis of the macroeconomic and regulatory environment
- Analysis of the performance of the banking sector using a financial ratio analysis (FRA)

Focusing the research on these three countries is rooted in the fact that Asian banks make up 43 percent of the global banking market, measured by total assets of the world's 100 largest banks. China, Japan, and South Korea hold 95 percent of those assets, signifying the importance and influence these banking sectors have on both a global and a regional scale, emphasizing part of the relevance of the underlying research.

Moreover, apart from actively contributing to shaping worldwide developments and the undisputed damage financial turmoil can inflict – arguments sufficient to focus research on dominating players in the financial market –, there is limited research on Chinese, Japanese, and South Korean banks compared to banks in Europe or the United States. Therefore, shifting attention to banks from these three countries may afford new insight into banking practices that can help offer alternative solutions or highlight looming financial market turbulences.

State of the Art

In general, there exists ample current and important historical research in the fields of financial sector (country-level focus) and bank performance (bank-level focus) analyses. The former scrutinize the entirety of a country's/region's banking landscape by looking at the environment banks are situated in (such as macroeconomic and/or regulatory developments), while bank performance analyses focus on financial developments of individual or groups of banks. One relevant type of analysis are FRA, which employ financial ratios as means of analysis. Key research employing financial sector analysis includes the works of Barth, Caprio Jr., & Levine (2001; 2013), Bijlsma & Zwart (2013), and Demirgüç-Kunt (World Bank, n.d. b). Pioneers of bank performance analysis are Amel & Rhoades (1988), Demirgüç-Kunt & Huizinga (1999), Ghosh S. (2016), or Mergaerts & Vander Vennet (2016).

In particular, however, there is a comparative lack of cross-country East Asia-specific research for both analysis types. While (East) Asian countries are included in large-scale, international research (e.g., Bertay, Demirgüç-Kunt, & Huizinga (2015)), specific research on Asian countries or the three in question is relatively rare. The works of Casu, Deng, & Ferrari (2016), Lee, Yang & Chang (2014), Noman, Gee, & Isa (2017), and Fu, Lin, & Molyneux (2013) are examples with direct application to (East) Asia.

Methodology and Approach

In order to be able to provide a sound analysis of the Chinese, Japanese, and South Korean banking sectors, it is paramount to look at both the environment banks are situated in as well as banks and their development over time. While most research focuses on either-or, the aim of this thesis was to combine them through performing both a banking sector and bank performance analysis at country level. These results are then interpreted at both country level as well as compared and contrasted across the three countries. *Figure 1* shows the modality of the analytical framework and the subsequent interpretation.

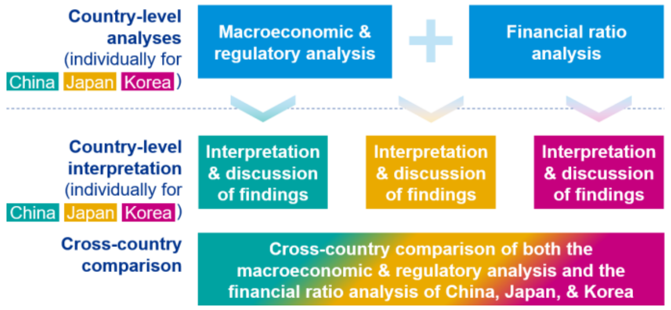

Figure 1: High-level overview of analytical framework and subsequent interpretation

The analytical framework is variable-based and has been derived eclectically, building on relevant scholarly works. The macroeconomic and regulatory analysis has its roots in the works of Casu, Deng, & Ferrari (2016) and Noman, Gee, & Isa (2017), using three variables. The FRA is based on Ghosh S. (2016), Kumbirai & Webb (2010), and Mergaerts & Vander Vennet (2016) with a total of 11 variables combining the viable triangle of profitability, liquidity, as well as risk and stability. *Figure 2* shows the breakdown of all variables.

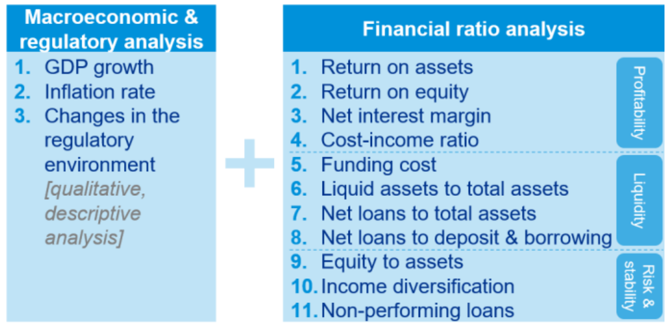

Figure 2: Variables employed in the analytical framework

Data for the macroeconomic and regulatory environment is derived from the World Bank (2019c; 2019d) and scholarly articles. The FRA's data stems from the Orbis Bank Focus (2017) database. There are 479 individual banks used for the FRA, which requires a total of over 200,000 individual calculations to be carried out.

To answer the research question, the results of the two analyses are brought into context through the discussion of findings – first at country level to prepare for the later cross-country interpretation and discussion.

Main Facts

The analyses gave insight into the environment Chinese, Japanese, and Korean banks face and those institutions' performance from 2011 to 2016, with key results being:

- China: Declining GDP growth led to an increase in defaulted loans and a reduction in overall profitability. Banks have considerably reduced their cost base to counter weakening net income, presenting one of the world's lowest cost-income ratios. They rely heavily on interest-bearing activities and have tight liquidity buffers, which may weaken stability in case of shocks.
- Japan: Profitability and defaulted loans were similarly volatile as GDP growth. Banks failed to strongly diversify income, relying strongly on interest income, whose margins were continuously falling, despite the majority of assets not being tied to loans.
- South Korea: The constant GDP growth of the country is, on the one hand, positively reflected by increases in profitability and a reduction of defaulted loans. On the other hand, however, costs were rising, bank spreads diminishing, and signs of increased credit risk visible, painting a heterogenous picture of South Korean banks below the surface.

Results

The research question has been answered by looking at the individual country analyses across all variables as well as in international comparison. What the research has shown is that the Chinese, Japanese, and South Korean banking sectors, in some aspects, are closer to one another than when compared internationally (e.g., regulatory pressure is less strong, profitability – measured by return on assets/equity and net interest margin – declined, income diversification improved). For the other variables, the research revealed that the countries are quite individualistic, having specific challenges and characteristics of their own. Despite certain signs for low-level caution (e.g., China's reliance on interest income), no hints for immediate concern in terms of the industries' stability has been found.

The benefit of the research and its eclectic approach is that it allows for a comprehensive overview that can be especially useful as a tool for initial analysis of banking sectors in order to identify areas for more in-depth research. Considering certain limitations, relevant future research areas include, among others, the differentiation of bank types, cross-analysis with statistical models, or enriching the analysis with expert interviews/opinions.

References

All references can be found here in the thesis' full version.

About the Author

Alessa Lux holds a BSc from Vienna University of Economics and Business. She spent her exchange at Hong Kong University of Science and Technology and taught as a lecturer at Harbin Institute of Technology in Weihai, China. Since 2014 she has been employed as a management consultant at an international consultancy firm, working with banks on strategy, restructuring, and performance improvement.

Contact information: lux.alessa@gmail.com

Examination Date: 18 October 2021