

Assessing Competition and Financial Stability in the Banking System by Assessing Capital and Losses in Crisis

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Abstract

The purpose of this paper was to assess the competition and financial stability in the country's banking system by assessing capital and losses in times of crisis. In this study, we use the data of banks listed on the Tehran Stock Exchange for the period 2006-2018, for this purpose, we used the method of panel autoregression vector model to study the relationship between macroeconomic variables, banking stability and banking competition. The results showed that a one percent increase in economic growth led to an increase in banking stability and banking competition. On the other hand, banking stability has had a positive and significant effect on economic growth and banking competition. Finally, the results of the impulse response function charts and variance decomposition showed that the shock of the banking competition led to increase in economic growth and banking stability. The results indicate a significant relationship between competition and stability. Also, the results of the Granger causality test showed that there is a two-way relationship between the variables.

Keywords: Banking competition; economic growth; stability; market structure; VECM model.

JEL Classification: G24, O40, C60, D40, B23.

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Bibliography

- Abdolshah, F., and S. Moshiri. "Stress Testing for Default Probabilities in Banking Industry; An Application of Credit Portfolio Approach", *Economics Research* 17, no. 66 (2017): 23-54. [In Persian].
- Abounoori, A., and M. Teimoury. "Investigation of the Effect of Financial Development on Economic Growth: A Comparative Study in OECD and UMI Countries", *Economic Growth and Development Research* 3, no.11 (2013): 40-29. [In Persian].
- Beck, Thorsten, Asli Demirguc-Kunt, and Ross Levine. "Bank Concentration, Competition and Crises: First Results", *Journal of Banking and Finance* 11, (January 2005): 1581-1603.
- Carletti, Elena, and Philipp Hartmann. "Competition and Stability: What's Special About Banking?", *Frankfurt: European Central Bank WORKING PAPER*, no. 146, (June 2002).
- Clair, Robert Wayne St. "Macroeconomic Determinants Of Banking Financial Performance and Resilience in Singapore", *Monetary Authority of Singapore, Mas Staff Paper*, no. 38 (December 2004).
- Egan, Mark, Ali Hortaçsu, and Gregor Matvos. "Deposit Competition and Financial Fragility: Evidence from the US Banking Sector", *American Economic Review* 107, (January 2017): 169-216.
- Fu, Xiaoqing, Yongjia Rebecca Lin, and Philip Molyneux. "Bank competition and financial stability in Asia Pacific", *Journal of Banking & Finance* 38, (January 2014): 64-77.
- Hirtle, Beverly, Anna Kovner, James Vickery, and Meru Bhanot. "Assessing Financial Stability: The Capital and Loss Assessment under Stress Scenarios (CLASS) Model", *Federal Reserve Bank of New York Staff Report* 663 (November 2016).
- Jahangard, E., and F. Abdolshah. "The effect of macroeconomic variables on banking industry stability", *The Journal of Economic Policy* 9, no. 18 (2017): 205-229. [In Persian].
- Kapinos, Pavel, and Oscar Mitnik. "A Top-Down Approach to Stress-Testing Banks", *FDIC Center for Financial Research Paper* no. 49 (June 2016): 229-264.
- Kocabay, Selvi Ak. "Bank Competition and Banking system Stability: Evidence From Turkey", PhD diss, *Istanbul: Middle East Technical University*, 2009.
- Mashayekh, S., and M. Moghaddasi Nikjeh. "Stress Testing: A New Approach for Risk Management with Emphasis on Banks' Capital Requirement", *Journal of Accounting and Social Interests* 7, no. 1 (2017): 35-56. [In Persian].

- Mirbagheri Hir, Mir Nasser, Mohammad Reza Nahidi Amirkhiz, and Siamak Shokouhi Fard. "Assessment of Financial Stability and Factors Affecting the Financial Stability of the Country's Banks", *Quarterly Journal of Fiscal and Economic Policies* 4, no.15 (2017): 23-42. [In Persian].
- Moch, Nils. "Competition in fragmented markets: New evidence from the German banking industry in the light of the subprime crisis", *Journal of Banking and Finance* 37 (August 2013): 2908-2919.
- Mohammadzadeh, Y., K. Jahangiri, A. Refah-kahriz, and E. Valizadeh. "The effect of property rights and political risk to attract foreign direct investment using with PVAR approach", *Journal of Applied Economics Studies in Iran* 7, no. 26 (2018): 115-144. [In Persian].
- Monsef, A., L. Torki, and S. Alavi. "Investigation of the Effects of Financial Development on Economic Growth in D8 Countries Group: a Bootstrap Panel Granger Causality Analysis", *Economic Growth and Development Research* 3, no. 10 (2013): 73-92. [In Persian].
- Noman, Abu Hanifa Md., Chan Sok Gee, and Che Ruhana Isa "Does bank regulation matter on the relationship between competition and financial stability? Evidence from Southeast Asian countries", *Pacific Basin Finance Journal*, Vol. 48 (2018):144-161.
- Parsanjad, Mohammad Hossein. "Analysis of Financial Stability of Iranian Banks in Business Cycles", *M.Sc. Thesis, Faculty of Economics*, University of Tehran, 2015. [In Persian].
- Pedroni, Peter. "Panel cointegration, asymptotic and finite sample properties of pooled time series tests with an application to the PPP hypothesis", *Econometric Theory* 3 (February 2004): 597-625.
- Rostamzadeh P, R. Shahnazi, and M.S. Neisani. "Identification of Factors Affecting on Credit Risk in the Iran Banking Industry of Iran Using Stress Test", *The Journal of Economic Modeling Research* 8, no. 32 (2018): 91-128. [In Persian].
- Rostamzadeh, P., and Y. Goudarzi Farahani. "Forecasting the Occurrence of Business Cycles Using Band-Pass Filter in Iran's Economy", *The Journal of Economic Policy* 9, no. 18 (2017): 41-64. [In Persian].
- Sehhat, S., F. Mosaferi Rad, and S.M. Shariat Panahi. "Investigating the Relationship among Economic Value Added, Return on Equity and Return on Investments in Insurance Companies", *Empirical Studies in Financial Accounting* 8, no. 32 (2010): 121-140. [In Persian].
- Shayegani, B., and M. Abdollahi Aran. "A Study on the Instability of Banking Sector in Iran Economy", *Journal of Iran's Economic Essays* 8, no. 16 (2011): 147-167. [In Persian].
- Vives, Xavier. "Competition policy in banking", *Oxford Review of Economic Policy* 27 (February 2011): 479-497.

Wei Lu, and Zhiwei Yang, "Stress Testing of Commercial Banks' Exposure to Credit Risk: A Study based on Write-off Nonperforming loans", *Asian Social Science* 8, no. 10 (July 2012).

Wong, Jim, Ka- fai Choi, and Tom Fong, "A Framework for Stress Testing Bank's Credit Risk", *The Journal of Risk Model Validation* 2, no. 1 (January 2008): 240-260.

Zarei, Jaleh, and Akbar Komijani. "Assessing Financial Stability in Iran with Emphasis on Banking Stability (Early Warning Test Approach)", *Applied Economics* 3, no. 10 (2012): 127-152. [In Persian].