

# Chapter 6

## THE IMPACT OF BANK CONCENTRATION ON BANKS' RISK INDICATORS: WESTERN EUROPEAN COUNTRIES BANKS PANEL DATA ANALYSIS (2011-2016)

Hüseyin ÇETİN<sup>1</sup>

### 1. INTRODUCTION

Whether banking concentration leads to stabilization or not, the banking concentration topic needs specific attention since the financial situation of banks intensely influences the sustainability of the real economical activities (**Dell'Ariccia et al. 2008**). Managing risk is significant for any bank. If one bank can not manage the risk properly, there can be a contagion effect globally.

In the literature, there are limited studies about the comparative impact of 3-banks asset concentration ratio and 5-banks asset concentration ratio on banks' risk indicators. In that research, the main objective is to find out banking concentration rates on Western European banks' risk indicators. Not only competition between banks influences banks' risk indicators, but also banking sector asset concentration rates influence the banking sector' risk indicators. When assets of biggest banks increases, there can be more risk or less risk in the banking sector. Moreover, Western European countries' banks' risk indicators are crucial world economy. Risky financial operation of that countries' banks may lead to a global banking crisis. In that research, the impact of banking asset concentration ratios on Western European countries' banks' profitability indicators will also be measured.

### 2. LITERATURE REVIEW

**Hassan and Bashir (2003)** researched about the determinants of profitability for Islamic banking in 21 within the period of 1994-2001. It was found that the concentration indicator with the top 3 banks' markets shares with the highest assets has important and positive relation for ROA and ROE.

---

<sup>1</sup> Dr. Öğr. Üyesi, Bursa Teknik Üniversitesi, huseyin.cetin@btu.edu.tr  
That research will be presented at BOR İzmir Conference(4-6 September 2019).

In the second analysis, it was unearthed that five largest banks' assets to total banks' assets (CR5) have an important negative influence on z-scores of Western European countries bank's panel dataset between the period of 2011-2016. Moreover, for the same analysis, three largest banks' assets to total banks' assets (CR3) did not have any significant on the probability of Western European countries' banks' defaults. It can be indicated that if five largest banks increase their dominance in terms of assets, the probability of bank default increases in the Western Europe zone.

In the third analysis, five largest banks' assets to total banks' assets (CR5) have significant positive influence on return on equity of Western European countries' banks' panel dataset within the period of 2011-2016. three largest banks' assets to total banks' assets (CR3) do not have any significant impact on return on equity for the same panel data set. It can be mentioned that if five largest banks increase their assets and become more dominant in terms of assets, return of equity increases in Western European banking zone.

It can be mentioned that when CR5 increases, shareholders of the Western European banks have more returns. Nevertheless, that circumstance has adverse impact on z-scores. In order to strengthen the banking system stability, more banks with large assets can compete with other largest banks. With more competition and new banking regulations, the probability of default can diminish.

Last, it can be indicated that research result for Western European countries' banks panel dataset does not correspond with the SCP hypothesis. It was found that when few banks increase their concentration in the market that circumstance reduces the ROA of Western European countries' banks' panel dataset.

## **REFERENCES**

- Abbasoglu, O. F., Aysan, A. F. & Günes, A. (2017) A Concentration, competition, efficiency and profitability of the Turkish banking sector in the post-crises period. *Bank and Bank Systems*, 2(3), 106-115.
- Alagöz, M. , Akalın, S. & Ceylan, O. (2016) The relationship between concentration and profitability in Turkish banking sector. *Journal of Emerging Economies and Policy*, 1 (1), 11-18.
- Ali, M.S.B., Intissar, T. & Zeitun, R. (2015) Banking Concentration and Financial Stability: Evidence from Developed and Developing Countries. *Economics Discussion Papers*, No 2015-22, Kiel Institute for the World Economy.
- Allen, F. & D. Gale, (2000) Financial Contagion. *The Journal of Political Economy*, 108(1), 1-33.
- Al-Zu'bi, K., & Balloul, M. (2005) Structure, Competitiveness and Efficiency Aspects of Jordanian Banking Industry. *Dirasat, Administrative Sciences*, 32(1), 230-249.
- Anasweh, M.S. (2015) The market concentration and banking industry performance. *Corporate Ownership & Control*, 13(1-10), 1257-1264. Doi: 10.22495/cocv13i1c10p11
- Arif, M.N.R.A & Awwalayah, T.R. (2019) Market Share, Concentration Ratio and Profitability: Evidence from Indonesian Islamic Banking Industry. *Journal of Central Banking Theory and Practice*, Central bank of Montenegro, 8(2), 189-201.

- Bain, J. S. (1951) The relation of profit rate to industry concentration: American manufacturing, 1936– 1940. *Quarterly Journal of Economics*, 65, 293–324.
- Berger, A.N., Klapper, L.F., & Turk-Ariss, R.(2009) Bank Competition and Financial Stability. *Journal of Financial Services Research*, 35 (2): 99-118.
- Bikker, J.A. & Groeneveld, J.M.(2000) Competition and Concentration in the EU Banking Industry. *Kredit und Kapital*, 33, 62-98.
- Bolarinwa, S. T. & Obembe, O. B. (2007) Concentration-Profitability Nexus: New Approach from Causality, *Studies in Microeconomics*, 5(1), 84-98.
- Bourke, P.(1989) Concentration and other determinants of bank profitability in Europe, North America and Australia. *Journal of Banking & Finance*, 13(1), 65-79.
- Dell’Ariccia G., Detragiache E. & Rajan R. (2008) The real effect of banking crises. *Journal of Financial Intermediation*, 17 (1), 89-112.
- Hassan, M.K., Bashir, A-H.M. (2003) Determinants of Islamic Banking Profitability. Paper Presented at the Economic Research Forum (ERF) 10th Annual Conference, Marrakesh-Morocco, 16-18 December.
- Hauswald,R. & Marquez,R.(2006) Competition and strategic information acquisition in credit markets. *The Review of Financial Studies*, 967-1000.
- Horvath, R., Seidler, J., & Weill, L. (2016) How Bank Competition Influences Liquidity Creation. *Economic Modelling*, 52,155-161. Doi: 10.1016/j.econmod.2014.11.032
- Hou, X., Wang, Q., & Zhang, Q. (2014) Market structure, risk taking, and the efficiency of Chinese commercial banks. *Emerging Markets Review*, 20, 75-88. Doi: 10.1016/j.ememar.2014.06.001
- Jansen, D., and de Haan, J.(2003) Increasing Concentration in European Banking: A Macrolevel Analysis. De Nederlandsche Bank Research Department, Research Memorandum WO no. 743.
- Matutes, C. & Vives, X. (2000) Imperfect Competition, Risk Taking and Competition in Banking. *European Economic Review*, 44(1), 1–34.
- Smirlock, M.(1985) Evidence on the (Non) Relationship between Concentration and Profitability in Banking. *Journal of Money, Credit, and Banking*, 17(1), 69-83.