Bank sectoral concentration and (systemic) risk:

Evidence from a worldwide sample of banks*

Thorsten Beck[†]

Olivier De Jonghe[‡] Klaas Mulier[§]

Abstract

We propose a new stock return-based methodology to measure banks' sectoral spe-

cialization, sectoral herding, and financial sector exposure. Using these measures for

a broad cross-section of banks and countries over the period 2002 to 2012, this paper

is the first to empirically gauge both the short- and long run relationship between

banks' sectoral concentration and banks' performance and stability. We find that (i)

sectoral concentration has only a weak (or even no) impact on banks' valuation; (ii)

bank volatility and systemic risk exposure decrease with banks' sectoral specialization

and banks' sectoral herding, and increase with banks' financial sector exposure; (iii)

these effects are significantly stronger in the long run than in the short-run; and (iv)

there exists important time and cross-country variation in these relationships.

Keywords: bank concentration, sectoral specialization, herding, bank risk, systemic stability, factor model

JEL classification: G01, G21, G28, L5

*The authors would like to thank Lamont Black, Fabio Castiglionesi, José Liberti, Martin Melecky, Geoffrey Miller, Phong Ngo, Alex Popov, Jason Sturgess, Wolf Wagner and seminar participants at the European Central Bank, FEBS conference in Surrey, the NYU-Law "2014 Law & Banking/Finance Conference", the Sydney Banking and Financial Stability Conference, the Norges Bank, the NY Fed, dePaul University, University of Glasgow, National University of Singapore, Nanyang Business School, Singapore Management University, CESifo-Munich, Australian National University, University of Melbourne, Massey University and Essex Business School for interesting discussions and helpful comments. This paper started as a background paper for the World Development Report 2014 entitled Risk and Opportunity: Managing Risk for Development. This paper and

⁷Cass Business School, CEPR, e-mail: Thorsten.Beck.1@city.ac.uk

[‡]Corresponding author, CentER, European Banking Center, Tilburg University, National Bank of Belgium, e-mail: o.dejonghe@uvt.nl

its findings do not necessarily reflect the opinions of the World Bank, their Executive Directors or the countries they represent.

§Ghent University, National Bank of Belgium, e-mail: klaas.mulier@ugent.be