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Risk management with a duration gap approach: Empirical evidence from a cross-country study of dual banking systems (Article)

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Abstract

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Purpose: In line with the IFSB and BCBS methodology, the purpose of this study is to undertake a comparative analysis of dual banking systems for asset-liability management (ALM) practices with the duration gap, in Islamic Commercial Banks (ICBs) and Conventional Commercial Banks (CCBs). Based on the research objective, two research questions are developed: How do the duration gaps of ICBs compare with those of similar sized CCBs? Are there any country-specific and regional differences among ICBs in terms of managing their duration gaps?

Design/methodology/ approach : The research methodology comprises two-stages: stage one uses a duration gap model to calculate the duration gaps of ICBs and CCBs; stage two applies parametric tests. In terms of the duration gap model, the study determines the duration gap with a four-step process. The study selected a sample of 100 banks (50 ICBs and 50 CCBs) from 13 countries for the period 2009-2015. **Findings:** The paper provides empirical insights into the duration gap and ALM of ICBs and CCBs. The ICBs have more variations in their mean duration gap compared to the CCBs, and they have a tendency for a higher (more) mean duration gap (28.37 years) in comparison to the CCBs (11.79 years). The study found ICBs as having 2.41 times more duration gap compared to the CCBs, and they are exposed to increasing rate of return (ROR) risk due to their larger duration gaps and severe liquidity mismatches. There are significant regional differences in terms of the duration gap and asset-liability management. **Research limitations/implications:** Future studies also consider “Off-Balance Sheet” activities of the ICBs, with multi-term duration measures. A larger sample size of 100 ICBs with 10 years’ data after the GFC would be more beneficial to the industry. In addition, the impact of an increasing benchmark rate (e.g. 100, 200 and 300 bps) on the ICBs as per the IFSB 20 per cent threshold can also be established with the duration gap approach to identify the vulnerabilities of the ICBs. **Practical implications:** The study makes profound contributions to the literature and suggests various policy recommendations for Islamic banks, regulators, and standard setters of the ICBs, for identifying and measuring the significance of the duration gaps; and management of the ROR risk under Pillar 2 of the BCBS and IFSB, for financial soundness and stability purposes. **Originality/value:** To the best of the authors’ knowledge, this is a pioneer study in Islamic banking involving a sample of 100 banks (50 ICBs and 50 CCBs) from 13 countries. The results of the study provide original empirical evidence regarding the estimation of duration gap, and variations across jurisdictions in terms of vulnerability of ICBs and CCBs in dual banking systems. © 2020, Emerald Publishing Limited.

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