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# Systemic interest rate and market risk at US banks

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**Abstract** This paper is the first to quantify and analyze the dynamics of market risk (*MR*) and interest rate risk (*IRR*) of the system of US bank holding companies (BHCs) based on time-varying risk exposures estimated using the Kalman filter. These dynamics can be ex-plained to a considerable degree by the development of the macro economy as well as by the state and structure of the banking system itself. We further determine each single bank's contribution to the banking system's *MR* and *IRR* and show that single banks have non-trivial leverage over the banking system's systematic risk exposure at specific times. Such risk contributions can be explained by banks' financing or deposit base, maturity transformation intensity and interest income, earnings diversification and the liquidity of banks' holdings. Our findings thus facilitate better oversight and management of the systematic risks inherent in the banking system.

**Keywords** Interest rate risk · Market risk · Banks · Banking system

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