Time-varying bank capital requirements with capital distribution constraints: A DSGE approach

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ABSTRACT

We evaluate stabilizing effects of heightened and time-varying minimum capital requirements on the financial sector and the economy. Under the current Basel regulation with time-varying minimum capital requirements, when financial intermediaries incur losses on capital, they can release extra capital accumulated in advance during normal times. As a result, they do not need to contract credit supply in order to keep the capital ratio high enough during bad times. Our simulation results show that a taxing scheme which works as capital distribution constraints on intermediaries significantly enhances the stabilizing effects of time-varying minimum capital requirements. This evidence partly provides support for the current Basel III counter-cyclical capital buffer regulations.

Keywords: Capital requirements; Basel III; DSGE model; Capital distribution constraints; Counter-cyclical capital buffer