



TOPICS:

Banking Regulation

SOURCE:

Bank for International Settlements

BIS: The Leverage Ratio and the Output Floor - Complementarities and Overlaps

- The paper examines whether the Basel III **leverage ratio (LR)** and **output floor (OF)** operate as substitutes or as complementary prudential safeguards, and how both interact with risk-based capital requirements.
- The LR provides a non-risk-based backstop by requiring Tier 1 capital relative to total leverage exposures. The OF instead addresses excessive variability in risk-weighted assets (RWA) generated by internal models. At full implementation, RWA cannot fall below **72.5% of RWA calculated using standardised approaches**. Unlike the LR, the OF therefore retains a degree of risk sensitivity and preserves the operation of risk-based capital buffers.
- The authors develop an analytical framework expressing all three constraints through RWA density. Whichever of the unfloored **RWA density**, OF-implied density or LR-implied minimum density is highest determines required capital. Although one backstop can sometimes replace the other as the binding constraint, substitution is imperfect and depends on banks' portfolios, model outcomes and applicable regulatory requirements.
- Empirical evidence covering **29 G-SIBs during 2014–25** shows the LR becoming increasingly important: it was binding for fewer than 25% of the sample in 2014 but more than 55% by end-2025. Binding constraints are also dynamic, with banks switching between LR and risk-based requirements **55 times** across annual observations.
- For the **13 G-SIBs disclosing OF information at end-2025**, transitional arrangements meant that none was OF-bound. Under a fully phased-in 72.5% floor, however, **six would become OF-bound**. For three of these, the LR would not provide an alternative backstop if the OF were removed. This supports the paper's conclusion that maintaining both mechanisms provides distinct safeguards against excessive leverage and excessive variability in internally modelled RWA.

