A Swiss National Bank working paper proposes measuring market-implied bank capital by subtracting debt from market capitalization to measure risk.

Bank stress tests have become a regular feature since the Global Financial Crisis. A new working paper from the Swiss National Bank proposes a new approach using equity prices and credit default swaps (CDS) spreads.

In a market-based stress test, only focusing on equity isn't sufficient to assess total risk or loss potential of banks’ assets. Liabilities should also be taken into account, according to the report from Martin Indergand, Eric Jondeau and Andreas Fuster.

In a downturn, a banks’ equity is the first affected source of funding, a reasonable assumption for well-capitalized banks and mild downturns. However, in a severe crisis, debt holders can also suffer losses.
Because banks fund their assets predominantly with debt, a small percentage loss on debt may correspond to a large dollar loss, the authors write.

Their proposed methodology to measure market-implied capital of banks is to subtract a credit spread correction from market capitalization.

Without taking debt into account, the estimated impact of a severe market downturn is systematically distorted, and underestimates the risk of banks with low market capitalization.