Optimal Risk Weights

Macro Field Paper Presentation - First Round

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- Moral hazard leads banks to take on excessive credit risk resulting in bank failures hampering credit availability, financial stability, and economic activity (Romer and Romer 2017).
- **Broad research question:** How should bank regulation address moral hazard?

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- RBC requirements aim to address moral hazard by forcing banks to have 'skin in the game' and internalize the social costs of bank failures.

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  - Possibly a blunt way to address gaming by banks?

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  Given this trade-off between information and incentives,

  - How do different rules about risk weights change the probability of bank failure and the quantity of credit?
  - What are optimal risk weights?
  - To what extent does the Basel III approach balance this trade-off?

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Develop a two-period model in the spirit of Allen and Gale (2000), Boyd and De Nicolo (2005), and Kareken and Wallace (1978):

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- Extend to dynamic setting to incorporate reputation effects (in the spirit of Dovis and Kirpalani 2020).

Basel I Risk Weights

Risk Weight (%)	Asset types
0	Cash, bullion, Treasuries
20	MBS with AAA rating
50	Municipal bonds, residential mortgages
100	Corporate debt

The framework of weights has been kept as simple as possible and only five weights are used.

Basel (1988)

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  - These models are designed and calibrated by banks and then the estimates are approved by the bank supervisor.

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Behn, Haselmann, and Vig (forthcoming)

- Use loan-level data from Germany to study the introduction of capital requirements using internal-rating based (IRB) risk weights.
- They find that banks systematically underreported risk.
- Banks with higher gains from underestimating risks underestimate risks more.
- Larger banks benefit from IRB more than smaller banks.

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