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## Managing Counterparty Risk in OTC Markets

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We study how counterparty risk affects trading decisions in over-the-counter (OTC) markets. Banks first manage their default risk, and then decide on credit default swap (CDS) trading volumes to hedge against an aggregate risk factor. Because counterparty risk introduces an asymmetry between protection buyers and sellers, our model predicts that perfect risk sharing is only done between safe banks, while riskier banks still maintain diverse post-trade exposures. We show that the costly actions exerted by banks to reduce their default risk are not socially optimal. Interestingly, we find that banks may choose to reduce their default probabilities below the socially optimal level, depending on the imposed trade size limits and costs of risk management. The model produces new empirical predictions including (i) intermediation is done by low-risk banks with medium initial exposure, (ii) banks with high initial exposures are net buyers of CDSs, and banks with low initial exposures are the main net sellers but only if they have sufficiently low default risk, (iii) heterogeneity in post-trade exposures is higher for riskier and smaller for safer banks. These predictions are borne out by bilateral exposures data from the CDS market.

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