

Risk-sharing or risk-taking? An incentive theory of counterparty risk, clearing and margins*

Bruno Biais[†] Florian Heider[‡] Marie Hoerova[§]

March 18, 2014

Abstract

Derivatives trading, motivated by risk-sharing, can breed risk-taking. Bad news about the hedged risk increases the expected liability of the protection seller, undermining her risk-prevention incentives. This creates endogenous counterparty risk and contagion from news about the hedged risk to the balance sheet of the protection seller. Margin calls after bad news can improve protection sellers' incentives and enhance the ability to share risk. Central clearing can provide insurance against counterparty risk but must be designed to preserve risk-prevention incentives.

JEL CLASSIFICATION: G21, G22, D82

KEYWORDS: Hedging; Insurance; Derivatives; Moral hazard; Risk management; Counterparty risk; Contagion; Central clearing; Margin requirements

March 18, 2014

*We would like to thank the Editor (Cam Harvey), an Associate Editor and two anonymous referees, our discussants Ulf Axelson, Jonathan Berk, Sugato Bhattacharyya, Bruce Carlin, Simon Gervais, Artashes Karapetyan, Lauri Vilmi as well as numerous seminar and conference participants for their comments and suggestions. A previous version of the paper was circulated under the title "Risk-sharing or risk-taking? Counterparty risk, incentives and margins". The views expressed do not necessarily reflect those of the European Central Bank or the Eurosystem. Biais gratefully acknowledges the support of the European Research Council.

[†]Toulouse School of Economics (CNRS-CRM, Fédération des Banques Françaises Chair on the Investment Banking and Financial Markets Value Chain at IDEI), email: bruno.biais@univ-tlse1.fr

[‡]European Central Bank, Financial Research Division, email: florian.heider@ecb.int

[§]European Central Bank, Financial Research Division, email: marie.hoerova@ecb.int