

Interconnectedness in the CDS Market¹

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Concentrated risks in markets for credit default swaps (CDS) are widely considered to have significantly contributed to the recent financial crisis. In this paper we study the structure of the CDS market using explicit connections based on the total number of CDS transactions, notional value of CDS transactions, net outstanding positions, and network diagrams. The main objective is to provide statistics that characterize the CDS market, the degree of counterparty concentration, the size of different contracts as well as underlying contractual features, and a preliminary analysis of interconnectivity. Our new approach informs the discussion of the structure and resulting fragility or stability of the CDS market and studies potential contagion among its participants. Our findings are of practical importance because, even after central clearing becomes mandatory, counterparty risk will remain a relevant systemic consideration due to the long-term nature of CDS contracts.

I. Introduction

The concentration of transactions and positions in credit default swaps (CDS) markets among a select group of large dealers is widely considered to have significantly contributed to the recent financial crisis. Due to the highly concentrated and interconnected nature of bilateral CDS contracting, the counterparty risk associated with potential defaults of large protection sellers is a potential source of systemic risk. Historically, the decentralized nature of over-the-counter (OTC) derivatives markets has made it difficult for regulators and market participants to obtain reliable information about prices and market exposures. The lack of transparency with respect to exposures held by market participants complicates the management of counterparty risk. Reportedly, this was one of the reasons why, prior to the recent crisis, certain market participants like American Insurance Group (AIG) were able to create large, yet unobservable, exposures (e.g. Markose et al. (2012)).

To the extent that a counterparty failure of a large swap market participant can result in sequential counterparty defaults and shock transmission through the swap market, the ensuing contagion can

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