

# “Credit Contagion from Counterparty Risk”

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Discussion

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# Related Literature

- Default clustering

Das, Duffie, Kapadia, and Saita (JF 2007): existing reduced-form models using common factors cannot generate sufficient dependencies across firms to reproduce the observed default patterns.

- Credit contagion

-- theoretical papers: Collin-Dufresne, Goldstein, and Helwege (WP 2003), Giesecke (JBF 2004), Jarrow and Yu (JF 2001).

-- empirical papers:

Jorion and Zhang (JFE 2007): industry contagion

This paper: counterparty contagion

# This Paper

- Identify counterparty relationship from Chapter 11 bankruptcy filings.
  - Industrial firms: mainly trade credits
  - financial firms: mainly loans
- Apply event study method with stock and CDS data to investigate the effect of counterparty contagion.
- It is expected that the effect of counterparty default on industrial firms is larger than that on financial firms because of the cascading effect in addition to the immediate default loss.

# Main Results

- The effect of a counterparty default on industrial firms is larger and lasts longer than financial firms.
- The cross-sectional counterparty effects are significantly related to creditor characteristics, such as the exposure ratio, recovery rate, correlation of equity returns, and volatility of the creditor
- Simulation results suggest the economic importance of counterparty risk in managing portfolio risk.

# Comments (1)

- Are markets efficiently pricing counterparty risk?

Table III CAR (Industrial Firms)		
Day	Mean(%)	T-statistic
-1,1	-0.93	-3.68***
-5,5	-2.29	-4.73***
-5,65	-9.56	-7.77***

# Comments (1)

- Is there a cluster of negative news about the creditor?
- If not, why delayed response in the equity market?
- Market friction:
  - Avramov, Chordia, Jostova, and Philipov (WP 2007) studies negative stock returns for financial stressed firm around rating downgrade.
  - They relate predictable stock returns to market frictions, such as information uncertainty, illiquidity, and high short-sell cost.

# Comments (1)

- Behavior:
  - Cohen and Frazzini (JF 2008): uses investor inattention to explain delayed response of the stock price of a firm to the news about an economic linked firm.
- In this paper, is the delayed response due to market friction or investor inattention?
- Could you construct trading strategy to make profit?

# Comments (1)

- There is also delayed response in the CDS market.

Day	Mean(%)	T-statistic
-1,1	2.47	-3.17***
-5,5	-5.58	-3.74***
-5,65	-15.41	-4.06***

# Comments (1)

- It could be more difficult to use market frictions to explain the delayed response in the CDS market because short-sell cost should be low.
- Could you construct trading strategy in CDS market to make profit?

# Comments (2)

- Is default anticipated?

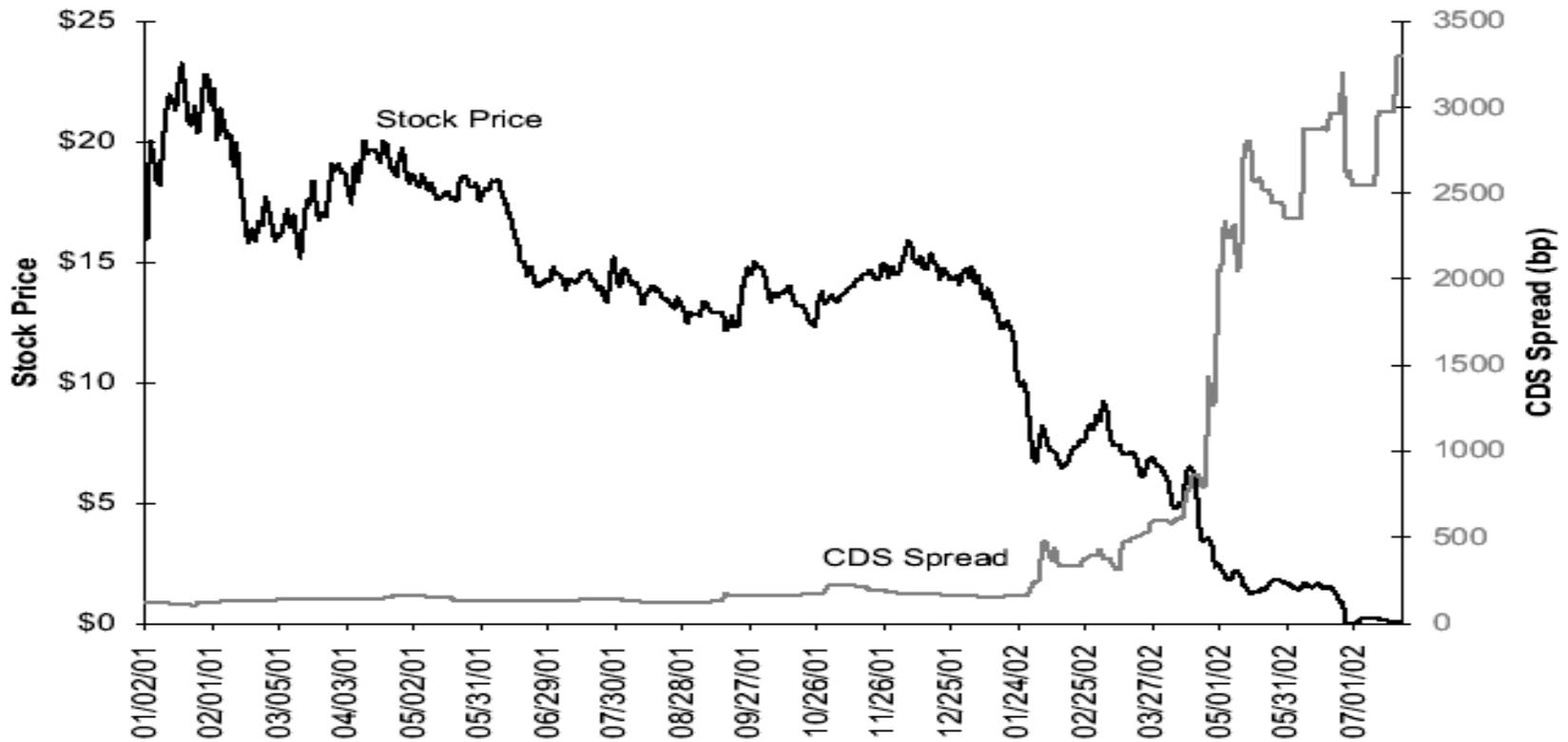


Fig. 1. CDS Spread and Stock Price of WorldCom Inc.

# Comments (2)

- There seems to be big movements in the equity and CDS markets for the borrower before it defaults.
- It would be interesting to study the response of the equity and CDS for the creditor when those big movements happened.
- It might strengthen the results if you study those big movements.

# Comments (3)

- How much information does the market know about the counterparty relationship?
- We would expect the equity and CDS response would be higher if the market knows less about the relationship.
- The degree of information the market knows about the relationship may be related to the correlation of equity returns between the creditor and borrower.

# Comments (3)

- If a low correlation indicates more diversified cash flows for a creditor, the equity and CDS response could be smaller for the creditor who has a lower correlation with the borrower.
- However, if a high correlation indicates that the market knows a lot about the business relationship, the equity and CDS response might be smaller for the creditor who has a high correlation with the borrower.

# Conclusion

- Very nice empirical study on counterparty risk.
- It has important implications for managing portfolio risk.