



RUTTER ASSOCIATES LLC

**Questions about Credit Default Swaps:
Compelling Evidence re Question #1**

Comments on

**“What is the Risk of European Sovereign Debt Defaults?
Fiscal Space, CDS Spreads and Market Pricing of Risk”**

by

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Question re CDS

Do CDS prices reflect economic fundamentals?

Do CDS "spread" risk or "concentrate" risk?

Do CDS reduce or increase systemic risk?

How transparent is the CDS market?

Do CDS on sovereigns really offer effective protection?

Do CDS prices reflect economic fundamentals?

Are CDS tools with which [speculators] can manipulate credit markets?

Claim #1: CDS exacerbated the 2008 global financial crisis by hastening the demise of companies such as Lehman & AIG.

Claim #2: CDS contributed to a breakdown in negotiations during the 2009 General Motors Chapter 11 reorganization

Claim #3 Credit Default Swaps caused the sovereign debt crisis in Europe

Aizenman, Hutchison & Jinjark Conclusions

AHJ Question 1: Are CDS spreads related to fiscal space measures and other economic determinants?

AHJ Conclusion -- YES: Fiscal space (measured either by government debt/tax base or government deficits/tax base) is an economically important and robust predictor of sovereign CDS spreads.

AHJ Question 3: Were SWEAP CDS spreads “mispriced” during the 2010 European debt crisis?

AHJ Conclusion -- YES: For the SWEAP countries, CDS spreads were lower than would be predicted tranquil period and higher than would be predicted during global crisis period.

AHJ Question 2: Is there is an identifiable dynamic pattern to CDS spreads during the crisis period?

AHJ Conclusion -- YES: Market-priced risk of sovereign default follows waves of contagion, overreacting and mispricing risk of sovereign default over a period of several years. The extraordinarily high CDS spreads in SWEAP in 2010, largely unpredicted by the model, may be attributable to excessive pessimism and an overreaction to the fiscal deterioration.

| Question re CDS | Empirical Evidence |
|---|---|
| Do CDS prices reflect economic fundamentals? | "Sovereign interest rates and CDS spreads have common underlying causes, rather than one driving the other" -- Fontana/Scheicher (2010) and Ammer/Cai (2007) |
| | "CDS spreads may be driven by macro economic conditions" -- Amato (2005), Packer/Zhu (2005), Micu et al. (2006), Berndt/Obreja (2010) Longstaff et al. (2011) and Dooley/Hutchison (2009) |
| | Fiscal space (measured either by government debt/tax base or government deficits/tax base) is an economically important and robust predictor of sovereign CDS spreads. -- AHJ (2011) |
| Do CDS "spread" risk or "concentrate" risk? | |
| Do CDS reduce or increase systemic risk? | |
| How transparent is the CDS market? | |
| Do CDS on sovereigns really offer effective protection? | |

Are CDS on Greek sovereign debt “worthless”?

| | Holder of Greek Sovereign Debt? | Agreed to Voluntary 50% Haircut? | Can this CDS purchaser start the process that could lead to determining that a Credit Event has occurred? | If a Credit Event is determined and the CDS is triggered, will this CDS purchaser receive payment? |
|----------------------------------|---------------------------------|----------------------------------|---|--|
| Greek Sovereign CDS Purchaser #1 | Yes | Yes | Yes | Yes |
| Greek Sovereign CDS Purchaser #2 | Yes | No | Yes | Yes |
| Greek Sovereign CDS Purchaser #3 | No | N/A | Yes | Yes |