# Discussion of Gilchrist and Zakrajšek: "Credit Risk and the Macroeconomy"

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Gilchrist, Zakrajšek, et al.:

- Gilchrist and Zakrajšek (2007 NBERWP)
- Gilchrist, Yankov, and Zakrajšek (2009 JME)
- Gilchrist, Ortiz, and Zakrajšek (2008)
- Gilchrist and Zakrajšek (2010)

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- 1. Provide better measure of firms' borrowing costs
- 2. Measure effect of firms' borrowing costs on macroeconomy

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background: principal-agent problem, deadweight loss, bankruptcy, monitoring, adverse selection, etc.

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- credit ratings may be stale, endogenous, smooth

### Greek 2-yr. Bond Yield and S&P Credit Rating



## Moody's Baa and Merrill Lynch BBB Indexes



# The Gilchrist-Zakrajšek Spread

Computed as follows:

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Caveats:

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### Going into Recession



#### maturity

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maturity

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maturity



maturity

## Gürkaynak-Sack-Wright Zero Coupon Yield Curve



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### Generalized Gürkaynak-Sack-Wright



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$$DD = \frac{\log(V/D) + (\mu_V - 0.5\sigma_V^2)}{\sigma_V}$$

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Regress  $S_{it}^k$  on components of distance-to-default model:

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Excess bond premium: cross-sectional average of OLS residuals:

$$\mathsf{EBP}_t = \frac{1}{n_t} \sum_k \hat{\epsilon}_{it}^k$$

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Idea:

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Hard to interpret what GZ excess bond premium is exactly

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## Excess Bond Premium in a VAR



Quarters after shock

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Excess bond premium is ordered last, but VAR contains three other financial market variables:

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- federal funds rate
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- is decrease in *I* due to tighter credit, or structural shock?

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In Bernanke-Gertler-Gilchrist (1996), credit channel was an amplification mechanism. Not a shock.



Fig. 4. Output response - alternative shocks. All panels: time horizon in quarters.

### Rudebusch-Sack-Swanson (2007)



## Rudebusch-Sack-Swanson (2007)



- risk premium is endogenous
- may be positively or negatively correlated with output, depending on the structural shock

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Excess bond premium has high forecasting power

- But what is it?
- Structural interpretation of shocks?
- VAR identification?