### **Credit Spreads and Business Cycles**

by Simon Gilchrist & Friends

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### **Executive summary**

### What we knew about credit spreads

- Credit risk is priced
- Variation in spreads unrelated to firm characteristics ("puzzle")
- ► Most of the variation is common across firms ("price of risk")

#### Some of Simon's contributions

- Spreads carefully constructed from individual corporate quotes
- Adjusted for call provisions and default probabilities
- Significant correlation with future economic growth

#### Suggested interpretation

Credit spreads reflect "strains in financial system"

# Questions someone else might ask

### Too much of a good thing?

- Why is BMA weight on credit spreads so high?
- Does forecast horizon matter?
- Why doesn't housing get more weight?
- Why are BMA weights so different for GDP and investment?
- ▶ Is the last decade different? The crisis?

#### Similar to - or different from - related work?

- ► Stock and Watson (JEL, 2003)
- Mueller (ms, 2009)
- ► Hatzius, Hooper, Mishkin, Schoenholtz, and Watson (MPF, 2010)

### What I'm interested in

### Cyclical properties of asset prices

▶ Often different from quantities — esp timing

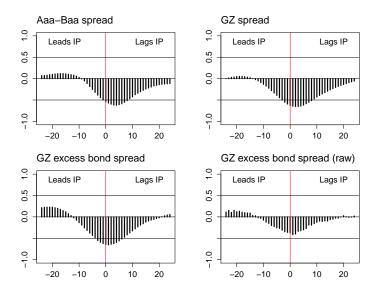
Including: variation in the price of risk

- ▶ In E(mr) = 1, the action seems to be in m
- Same m applies to all r's

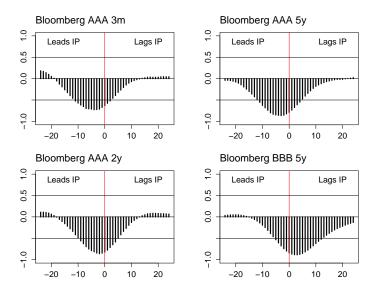
### Obvious question

▶ Do we see similar cyclical properties in other asset prices?

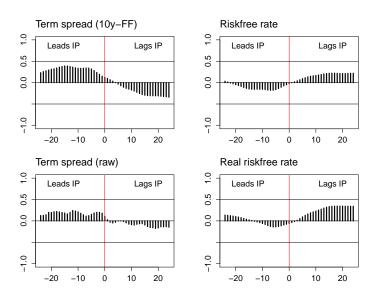
# Cyclical properties of credit spreads (GZ)



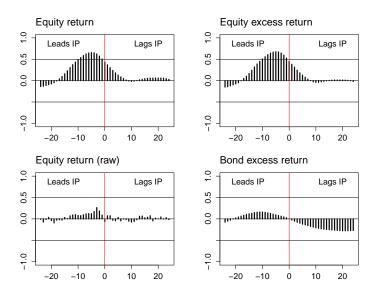
# Cyclical properties of credit spreads (Bloomberg)



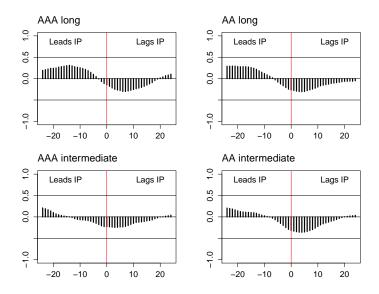
## Cyclical properties of term spreads



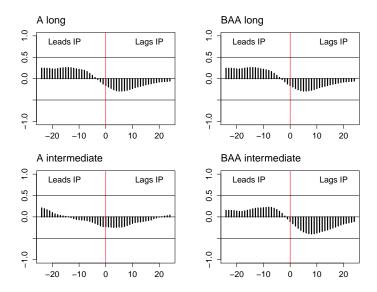
### Cyclical properties of returns



# Cyclical properties of corporate bond returns 1



# Cyclical properties of corporate bond returns 2



### Where does that leave us?

### Summary

- Simon's credit spreads clear improvement on Moody's/Fed version
- Open question which maturities/ratings are most useful
- ▶ Roughly contemporaneous with IP growth
- Whereas equity returns show pronounced lead ... Ditto corp bond returns?

#### Questions

- ▶ Do returns all show the same cyclical pattern?
- ▶ Due to financial stress? Or some other cyclical mechanism?

# Related work (some of it)

### Credit spreads

- ▶ Elton, Guber, Agrawal, and Mann (JF, 2001)
- Collin-Dufresne, Goldstein, and Martin (JF, 2001)
- ► Chen, Collin-Dufresne, Goldstein (RFS, 2009)

### Forecasting with financial variables

- ► Estrella and Mishkin (REStat, 1998)
- Gertler and Lown (OREP, 1999)
- Mody and Taylor (IMF, 2003)
- Stock and Watson (JEL, 2003)
- Mueller (ms, 2009)
- ▶ Hatzius, Hooper, Mishkin, Schoenholtz, and Watson (MPF, 2010)