Comovement or Safe Haven?

The Effect of Corruption on the Market Risk of Sovereign Bonds in Emerging Markets

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Discussion

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Overview

- Summary of the paper
  - Hypothesis
  - Evidence
  - Which explanation?
- Endogenous corporate fraud
  - Time varying incentives to fraud investors
  - Implications
- Suggestions

Hypothesis

- Conjecture: Market betas of sovereign bonds become relatively lower in a crisis for a country c with low levels of corruption [high *Corr(c)*]:

$$\frac{d}{dVIX}\frac{d}{dCorr(c)}beta(c) < 0$$

- Panel Regression: $\psi < 0$

$$r_{i,t} = \alpha_i + \tau_t + \delta' X_{i,t} + S\&P_t * \left[\eta Corr_i + \theta' X_{i,t}\right] + VIX_t * \left[\mu Corr_i + \pi' X_{i,t}\right]$$
$$+ S\&P_{i,t} * VIX_{i,t} * \left[\varphi + \psi Corr_i + \omega' X_{i,t}\right] + \varepsilon_{i,t}$$

- Time fixed effects: Estimate relative return beta (demeaned)

Evidence

- Find: $\psi < 0$
- Effect appears stronger for Asian country subsample

Panel Regression

	(1) Full sample 2nd order	(2) Full sample 3rd order
S&P*VIX	0.205***	0.149**
	(6.460)	(2.120)
S&P*Corr	-0.308***	-0.055
	(-3.820)	(-0.970)
S&P*Rating	-0.088	-0.212***
	(-0.920)	(-2.800)
VIX*Corr	-0.016	-0.028*
	(-0.820)	(-1.670)
VIX*Rating	0.042*	0.053***
	(1.820)	(2.720)
S&P*VIX*Corr		**-0.225*** **
		(-4.740)
S&P*VIX*Rating		0.181***
		(6.020)

Which Explanation?

- H1: Default risk increases during crisis more in corrupt countries… Why?
- H2: Ambiguity aversion implies higher risk premium as information in crisis about corrupt countries is more incomplete
- H3: Cognitive limitations make default risk a more relevant consideration in a crisis

Problems:

- How to discriminate between these explanations?
- H2 and H3 are based on latent processes … empirics is difficult
- H1 not spelled out in terms of underlying theory

Endogenous Corporate Fraud

- Assume a controlling shareholder:
  - Owns a small share w=0.3 of the equity value V of a firm
  - Can steal without punishment the amount F = 1
- Firm value is high at V=10 outside the crisis and V=5 in the crisis
- Committing fraud destroys 50% of equity value

	No Fraud	Fraud	Best Action
No crisis	0.3 * 10 = 3	0.3 * 5 + 1 = 2.5	No Fraud
Crisis	0.3 * 5 = 1.5	0.3 * 2.5 + 1 = 1.75	Fraud

Implications

- (Corporate) bond values decrease along with equity valuations in EM for firms with week corporate governance
- Bond default is clustered in crisis and corrupt firms
- Focus on corporate bonds:
  - Large within country variation of 'firm corruption' (Todd, JFE 2002; Durnev and Han Kim, JF 2005)
  - Can use corporate governance proxies:
    - Concentration of outside ownership
    - Disclosure quality
    - Degree of diversification
- Other data dimension: Default data, legal data

Suggestions

- Connect paper to the corporate finance literature on investor expropriation in Asia (in equity and bonds)
- Underdevelopment of financial market in Asia can be linked to the problem of corporate fraud (corruption)
- Focus on one model of endogenous fraud and default
- Improve empirical strategy
  - Shift focus from sovereign to corporate bonds (more observed heterogeneity)
  - Bring other data dimensions to bear on the problem