

The Effect of Cross-border Bank M&A on Bank Risk: Evidence from Yield Spreads

Ancona, September 2006

Main Points of the Paper

Cross-Border
M&A Risk via
Yield Spreads

Main Points of
the Paper

Definitions

Issues

- Cross-border Bank M&A may be risky
- Yield spreads capture risk
- If spreads go up, risk increases

Main Points of the Paper

Cross-Border
M&A Risk via
Yield Spreads

Main Points of
the Paper

Definitions

Issues

- Cross-border Bank M&A may be risky
- Yield spreads capture risk
- If spreads go up, risk increases

Main findings: all else being equal,

- Higher investor protection in target country decreases risk
- Higher depositor protection in target country *increases* risk (moral hazard argument)
- 100% cash payment increases risk

Measurement issue

Cross-Border
M&A Risk via
Yield Spreads

Main Points of
the Paper

Definitions

Issues

Do yield spreads really measure risk? And, if so, what kind of risk? Dependent variable used in the paper:

$$SP_{jt} = \alpha_j + \beta_j d_{jt} + e_{jt}$$

where $d_{jt} = 1$ inside the “announcement window”. OLS estimate of β_j is labelled “abnormal change”.

Measurement issue

Cross-Border
M&A Risk via
Yield Spreads

Main Points of
the Paper

Definitions

Issues

Do yield spreads really measure risk? And, if so, what kind of risk? Dependent variable used in the paper:

$$SP_{jt} = \alpha_j + \beta_j d_{jt} + e_{jt}$$

where $d_{jt} = 1$ inside the “announcement window”. OLS estimate of β_j is labelled “abnormal change”.

Elementary OLS algebra shows that

$$\hat{\beta} = \overline{SP}_{\text{inside}} - \overline{SP}_{\text{outside}}$$

The window is rather short (1-3 weeks), so what we are seeing here is rather the effect of the *announcement*.

Perceived risk vs actual risk

Cross-Border
M&A Risk via
Yield Spreads

Main Points of
the Paper

Definitions

Issues

When a merger is announced, it may take some time before the market is able to reckon its consequences. In the meantime, *uncertainty* increases.

Perceived risk vs actual risk

Cross-Border
M&A Risk via
Yield Spreads

Main Points of
the Paper

Definitions

Issues

When a merger is announced, it may take some time before the market is able to reckon its consequences. In the meantime, *uncertainty* increases.

If we measured risk as

$$\hat{\beta} = \overline{SP}_{\text{before}} - \overline{SP}_{\text{after}},$$

would things change? (A spread is not a stock return)

Issues

Cross-Border
M&A Risk via
Yield Spreads

Main Points of
the Paper

Definitions

Issues

- Is perceived risk a good indicator of risk?
- How long does it take for the market to adjust their perception? (Details may be known after some time)
- Are results robust?

Econometric nitty-gritty

Cross-Border
M&A Risk via
Yield Spreads

Main Points of
the Paper

Definitions

Issues

- A few more statistics wouldn't hurt.

Econometric nitty-gritty

Cross-Border
M&A Risk via
Yield Spreads

Main Points of
the Paper

Definitions

Issues

- A few more statistics wouldn't hurt.
- The SP variable seems to be right-skewed; the transformation $\log(1 + SP)$ masks this (to an extent).

Econometric nitty-gritty

Cross-Border
M&A Risk via
Yield Spreads

Main Points of
the Paper

Definitions

Issues

- A few more statistics wouldn't hurt.
- The SP variable seems to be right-skewed; the transformation $\log(1 + SP)$ masks this (to an extent). \implies check for outliers

Econometric nitty-gritty

Cross-Border
M&A Risk via
Yield Spreads

Main Points of
the Paper

Definitions

Issues

- A few more statistics wouldn't hurt.
- The SP variable seems to be right-skewed; the transformation $\log(1 + SP)$ masks this (to an extent). \implies check for outliers
- The larger specification has 98 observations and 16 regressors

Econometric nitty-gritty

Cross-Border
M&A Risk via
Yield Spreads

Main Points of
the Paper

Definitions

Issues

- A few more statistics wouldn't hurt.
- The SP variable seems to be right-skewed; the transformation $\log(1 + SP)$ masks this (to an extent). \implies check for outliers
- The larger specification has 98 observations and 16 regressors \implies Degrees of freedom may become a problem, esp. because White's correction is asymptotic

Econometric nitty-gritty

Cross-Border
M&A Risk via
Yield Spreads

Main Points of
the Paper

Definitions

Issues

- A few more statistics wouldn't hurt.
- The SP variable seems to be right-skewed; the transformation $\log(1 + SP)$ masks this (to an extent). \implies check for outliers
- The larger specification has 98 observations and 16 regressors \implies Degrees of freedom may become a problem, esp. because White's correction is asymptotic
- (possibly contradictory with my preceding item) Year dummies?

Econometric nitty-gritty

Cross-Border
M&A Risk via
Yield Spreads

Main Points of
the Paper

Definitions

Issues

- A few more statistics wouldn't hurt.
- The SP variable seems to be right-skewed; the transformation $\log(1 + SP)$ masks this (to an extent). \implies check for outliers
- The larger specification has 98 observations and 16 regressors \implies Degrees of freedom may become a problem, esp. because White's correction is asymptotic
- (possibly contradictory with my preceding item) Year dummies?
- How about a control group of *same*-country mergers?

Wrapping up

Cross-Border
M&A Risk via
Yield Spreads

Main Points of
the Paper

Definitions

Issues

Results are interesting, especially the moral hazard argument.
However,

- We need to make sure that what we are measuring is indeed what we want *risk* to mean
- We need to make sure that the results are not influenced by a few cases