Short Selling and Corporate Bond Returns

Discussion

Giorgio Valente, Essex Business School and City University of Hong Kong

2012 NTU International Conference on Finance
December 6th, 2012
What they do

• The paper investigates the information content equity short-selling activity on corporate bond (abnormal) returns.

• More specifically:
  – **Explanatory power of short selling:** Is abnormal equity short-selling activity correlated with contemporaneous corporate bond returns?
  – **Predictive power of short selling:** Does abnormal equity short-selling activity *predict* future corporate bond returns?
What they find

• Using a combination of various datasets for NASDAQ quoted firms over the period September 2000 – July 2001:
  – **Explanatory power of short selling:** abnormal equity short selling is generally *negatively correlated* with contemporaneous corporate bond (abnormal) returns
  – **Predictive power of short selling:** abnormal equity short-selling activity significantly *predicts negative future* (abnormal) returns
Samples: Time, Anything special?
Samples: Time, Liquidity issues?

Source: Lin et al. (2011)
Samples: Cross-section, sufficient?

- The cross-section of bonds used in the paper covers 156 bonds from 86 firms (only 4% of the original clean sample of 1,736)
  - Would 156 bonds be sufficient to capture the cross-section of corporate bond (abnormal) returns?
- Panel implications: Would a time span of only 10 months be sufficient to test for (time-series) predictability?
Variables construction I

• How are bond returns exactly computed?

\[
r = \frac{P_t - P_{t-1} + AI_t}{P_{t-1}}
\]

\[
r = \frac{P_t + AI_t + C_t - P_{t-1} + AI_{t-1}}{P_{t-1} + AI_{t-1}}
\]

• Why abnormal returns and not excess returns in excess of 30-day Tbill rates?
  – Abnormal returns do not include credit-risk and term-risk premia. Would the results be different if we incorporate these premia (hence use excess returns rather than abnormal returns)?
  – How can we rationalize the risk premia incorporated in abnormal returns? What are they?
Variables construction II

• The measures of abnormal short selling are look-ahead biased.
  – They are computed as differences with average, median and sum of shares shorted during the entire sample period. Any issue with the forecasting exercise?

• How do the three measures look like? Are they persistent?
  – It sounds odd that the correlation between normalized daily median shorted shares and normalized monthly sum of daily shorted shares equals 0.91! How do abnormal returns look like? Are they also persistent? Spurious regression problems?
Findings: Interpretation

• The results show that abnormal short selling activity in the equity market is associated with large negative abnormal returns for i) high-yield bonds and ii) marginally for intermediate-maturity bonds. Why?
  – Can the high-yield bond findings be due to a skewed sample? More than 63% of the sample is in the high-yield category!
  – The findings for intermediate maturity bonds can be rationalized in light of leverage aversion in portfolios of institutional investors (as in Asness et al., 2011)

• The results are less clear when significant positive association is found for bonds from i) small size firms ii) with small levels of institutional holdings.
Suggestions I

• As a preliminary evidence it would be nice to show how (abnormal) short selling in the equity market is associated with (abnormal) short selling in the corporate bond market.
  – Is there any lead-lag relationship? If so where does the information discovery take place?
  – If there is only a contemporaneous relationship, how can we rule out endogeneity?

• If data were (are) available: is there any order flow spillover from one market to another?
Suggestions II

• The predictability result may be affected by i) look-ahead bias in the construction of the short-selling variables ii) the persistence of the predictors (and abnormal returns).

• The statistical evidence in the paper is rather meagre (in-sample $R^2$ of 3-4%)

• If equity short-selling has genuine out-of-sample predictive power for corporate bond returns then predictability should generate economic value (Thornton and Valente, 2012)