FIN 423 -- Selling Corporate Debt

Eckbo, (JFE, 1986), Table 1:

- **723 debt issues from 1964-81**
  - **497 industrial (176 firms)**
  - **75 convertible issues (all industrials)**
  - **226 utilities (40 firms)**
- **avg size $158 million**

Selling Corporate Debt: Summary Statistics (Tables 2&3)

(1) 479 underwritten, 25 by rights offering

(2) Uses of funds:
- **222 -- capital expenditures**
- **147 -- general funding**
- **252 -- refunding**

(3) Issue size/Total debt:
- **6 to 9% (medians)**
- **7 to 15% (means)**

Selling Corporate Debt: Announcement Effects

(1) No effects on stock prices for straight debt issues
- **Z-tests generally less than 1 in absolute value**

(2) Effects of convertible debt offer on stock price are negative
- **most negative for low-rated (Baa & below)**
- **about 1.5 to 2% drop in stock price**
- **Z-test about -5 for overall sample**
- **similar to Asquith & Mullins evidence on stock issuance announcements**

Selling Corporate Debt: Convertible Debt

Convertible Bond is a package of straight debt plus a long-term warrant (call option) on the stock

- **to sell at par, the present value of the coupon payments must be enough below market rates to off-set the value of the warrant**
- **warrants are typically priced "out-of-the-money"**
  - **otherwise they would be too valuable at issuance**

Selling Corporate Debt: Convertible Debt (cont.)

Selling convertible debt is analogous to selling equity

- **won't be converted into equity until the stock price rises so the warrant is "in-the-money", S>X**
- **as long as the components of the security are priced fairly, there is no profit opportunity form selling convertible bonds**
  - **some argue that this security reduces agency costs of debt**

Calls of Straight Debt: Vu (JFE, 1986)

Why would you do this?

- **(1) Reduce interest costs (refunding)**
  - **if PV(interest savings) > call price, do it**
- **(2) Change optimal capital structure**
  - **trade-off corp tax shield vs agency/bankruptcy costs**
- **(3) Eliminate restrictive covenant from a particular issue**
  - **prevents minority bondholders from holding up firm**

Calls of Straight Debt: Facts

102 bond calls from 1962-78
- no other contemporaneous event
- stock & bonds prices available

75% of the bonds have market value < call price at call announcement
- mean = -4.7% (median = -1.1%)
- implies small effects on stock value
  - -4.4% is largest effect

Calls of Straight Debt: Announcement Effects

(1) Overall, not much effect

(2) Broken down by change in leverage, results are consistent with recapitalization evidence
- stock prices rise when leverage rises
  - information effect?

(3) Eliminating restrictive covenants seems to be relevant for industrials, but not utilities
- avg premium of $559,000

Selling Corporate Debt: <u>Questions</u>

(1) Why have call provisions in straight debt?

- if market prices interest rate risk correctly, you are buying a long-term call option when you sell the debt

- do most CFO's have a comparative advantage at forecasting interest rates?

(2) Why would the U.S. gov't include call provisions in its long-term bonds?

Selling Corporate Debt: <u>Questions</u>

(3) Since stock prices fall when equity issuances are announced, and don't change when debt issuances are announced, what does this imply about investment policy?

(4) If bond issuances were more predictable than stock issuances, how would this affect estimated stock price effects?