

# FIN 514

## Selling Corporate Debt

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**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)**

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**(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

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## **(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**

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**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 offset 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.)

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## 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 from selling convertible bonds
  - some argue that this security reduces agency costs of debt

# Calls of Straight Debt: Vu (JFE, 1986)

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## Why would you do this?

- (1) Reduce interest costs (refunding)
  - if  $PV(\text{interest savings}) > \text{call price}$ , do it
- (2) Change optimal capital structure
  - tradeoff 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

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## 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

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- (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: Questions**

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**(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: Questions**

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- (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?**

# Return to FIN 514 Home Page

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