## FINA 3070 Notes 4B

Ian Y.E. Pan

2020

## 1 When A (Listed) Company Needs New Capital

- Increase in "retained earnings": without printing new bonds/shares, a company can keep dividend constant when net income increases, or even reduce dividend.
- Raise new capital
  - New borrowing
    - \* Private loans: not to be traded (e.g. bank loans)
    - \* Public bonds: tradeable (straight/simple bonds, convertible bonds)
  - New shares
    - \* Seasoned equity offering: already listed company
    - \* P.s. unseasoned equity offering: IPO, i.e. private company becomes public (listed) company

## 2 Debt Raising (Bond Issuing) By Listed Company

## 2.1 Private Placement (not our focus)

- "Small" amount of borrowing from small number of "selected lenders".
- Raise loans from "commercial banks", or "rich individuals / institutional investors".
  - Common in both HK and US.
- Issue small number of bonds to investment banks to be resold to their clients.
  - Common in US, less common in HK.

### 2.2 GCO (General Cash Offer)

- Issue "many" new bonds to the public.
- Common in US, less common in HK.
- Investment banks serve as "underwriters" (receive spread/compensation from company).
- Public announcement (optional: approval by special meeting of share-holders).
- Book-building (demand book) by i-bank underwriters
  - Invite many investors (small investors might not be invited).
  - Road shows: presentation explaining characteristics of new bond (share), e.g. coupon rate, YTM etc.
  - Collect "individual demand curves of each investor"  $\rightarrow$  get aggregate demand curve.
  - Decide offering price (i.e. printing price, issue price).
- Issuing new bonds have lower GCO costs than issuing new shares.

# 3 Book-Building: Slope of Individual and Aggregate Demand Curves

#### 3.1 Individual Demand Curve Slope

- Information asymmetry and difficulty of valuing the common stock: the more severe info asymmetry, the steeper the slope.
- Investors that are more risk-aversed (or with more capital constraint) have steeper slope. (Even if you lower the price, I'm still only willing to buy a small quantity.)
- Short sales contraints also steepen the slope.

#### 3.2 Aggregate Demand Curve Slope

• Horizontal summation of different investors' slopes. (see Notes4B pp.6)

## 4 Bond Rating

#### 4.1 Seniority Declining

- Bonds issued earlier (senior bonds) have less default risk than junior bonds, which are issued more recently. Reason: Suppose for a specific the cash flow of a company is low, the senior bond-holders will receive their payments first.
- Senior bonds have higher bond rating (e.g. AAA) than junior bonds (e.g. A).
- Subscribers (investors) of the latest batch are 'indifferent'. Because they pay a fair price (AA-grade price for AA-grade price bond).
- Seniority declining is more common, as early investors will demand this as a protection (to avoid being hurt later). Therefore, the outstanding bonds' price usually doesn't change even if new bonds are issued.
- However, the market price of the original batch (senior bonds) might still change (not because of the new bond issues, but because of the company's future performance).

### 4.2 If No Seniority Declining (Notes4B pp.12)

- The company is 'happy' (more borrowing value with AA-grade price; calculate rectangle area).
- The earlier shareholders are 'unhappy' (suffer capital loss).
- Subscribers (investors) of the latest batch are 'indifferent'. Because they pay a fair price (AA-grade price for AA-grade price bond).

#### 4.3 Misc.

- If a firm issues more 'straight' bonds, the stock price usually doesn't change.
- Thus, raising new capital is considered 'neutral news'.

## 5 Equity Raising (Stock Issuing) By Listed Company

#### 5.1 Placing / Private Placement

- A small number of new shares to a small number of big investors.
- Common in HK, less common in US.

#### 5.2 GCO

- Lots of new shares to the public, through i-banks.
- Common only in US.

### 5.3 Rights Offering

- Lots of new shares issued on a 'pro rata (proportional) basis' to 'current' stockholders. (E.g. a current stockholder holding 1% of existing shares will subscribe to 1% of the newly shares to be issued.)
  - Current stockholders can also choose to 'give up' such right.
- The percentage ownership won't be affected by the newly issued stocks: important for closesly-held companies (e.g. in HK, UK, Europe).
- No book-building necessary (the demand is fixed proportionally anyways.)