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Valuation of Trade Related Property

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What is trade related property

A real property (land and structure) that has been purposely designed to be used or sold in an open market as fully an operational business unit and the value of which is derived from its trading potential.

Examples include casinos, hotels, bars, restaurants, movie theatres or cinemas, gasoline / petrol station etc

Two major issues

- Valuation of the asset as a going concern business entity.
- Apportioning of value into it components such as real property and intangible assets

Valuation approaches

- Market Comparison Method
- Profits Method (expected future cash flows)

Market Comparison Method

- Sales comparison
- Unit rate - adjusted price per room (hotel)
- Other indicators correlated with asset value (e.g. Coke price multiple for hotel)

Profits Method

- Asset value derived from profits generated from the operation of the business
  - PV of future profits (average operator)

- Similar to receipts and expenditure

Discounted future incomes

1. Capitalize stabilized EBITDA (**E**arnings **B**efore **I**nterest, **T**axes, **D**epreciation, and **A**mortization)

- DCF (Discounted Cash Flow) shortcut
- **How to determine the capitalizartion rate?**

2. More detailed approach - DCF

- **How to determine the discount rate and future income growth**?

Determination of Discount Rate

Discount rate (**Rn**) = *Expected* return on the asset

= Risk Free Interest Rate (**Rf**) + Risk Premium (**Rp**)

Rf - refers to *long term* rate (>50 years)

- Proxied by government bond yield (US 30-Year Treasury Bond Yield + premium or HKMA 15-year HKEFN Yield + premium)
- Premium estimated from yield curve

Rp - Risk Premium (or Excess Return)

- Subjective assessment
- Estimated from the financial markets
- Assets (e.g. hotels) held by listed company as the only or major form of investment (listed hotel companies and hotel REITs)

Capital Asset Pricing Model (CAPM)

$$Re = Rf + \beta e \boxed{(Rm - Rf)}$$

Return on hotel stock / REIT

Beta of hotel stock / REIT

Expected market return

Market Risk Premium (MRP)

Hotel stock premium = βe x MRP

βe available from Google Finance / Bloomberg or found by regression

Asset beta and stock beta

- βe of the listed hotel security (leveraged) ≠ beta of the hotel βa (unleveraged).
- Asset beta (βe) can be deduced from βa and debt to equity ratio of the listed security:

$$\boxed{\beta_a = \frac{\beta_e}{1+(1-t)(D/E)}}$$

D = Market value of Debt
E = Market value of Equity
t = effective tax rate

Limitations

- Limitations of the CAPM
- Liquidity risk of the Asset not properly accounted for (listed securities more liquid than asset)
- Listed securities have other assets / businesses
- Agency problem

Market Risk Premium

- Estimated from historical risk premium
  - History may not repeat itself
- Forecasts by analysts
  - Subjective
  - Basis of forecasts not known

Discount rate (Rn)

The Rn given by the CAPM is

$$Rn = Rf + \boxed{\beta a \ (Rm - Rf)}$$

Risk Premium

Rp

Capitalization rate (R)

Freehold or very long leasehold property, the capitalization rate is

$$\boxed{R = Rn - g - d}$$

Where g is the expected (long term) profit growth rate and d is the average depreciation rate of the asset

The Apportioning Problem

- Trade related properties comprise of tangible (real property) and intangible assets (goodwill and other idnetifieable intangible assets).
- Sometime it may be necessary to apportion the value of the asset to its tangible and intangible components for tax, mortgage, reporting or other purposes

Commonly used methods

Deduction method

Value of intangible = value of the trade related property as going concern business entity less all separately identifiable tangible assets.

Value of goodwill = value of the trade related property as going concern business entity less all separately identifiable assets.

Tangible asset valuation

Going concern vs vacant possession

Possible outcomes

- Vacant possession for renting – low estimate
- Going concern business entity – high estimate
- Other considerations
  - Market conditions, substitutability, information cost, heterogeneity preferences of market participants etc

Choice of Method

- In most cases the individual component alone cannot generate income or non-tradable in the market.
- Apportioning is often a pure theoretical exercise that cannot be easily related to reality
- The appropriate apportioning method depends on the purposes (e.g. tax, mortgage loan etc)

Thank you