

## **Learning Module 4: Overview of Equity Securities**

### **LOS 4a: describe characteristics of types of equity securities**

Unlike debt securities, equity securities do not impose an obligation on the issuer to repay the amount financed. Instead, shareholders act as owners of a company with a claim on the company's net assets and expect that management will act in the shareholders' best interests. Equities can be split into two main categories: common securities and preference securities.

### **Common Shares**

Common shares represent an ownership interest in a company. Similar to preferred shareholders, common shareholders have a claim to the company's net assets in the event of a liquidation. Unlike preferred shareholders, however, common shareholders share in the company's operating performance and participate in the governance process through voting rights. Since it is often not feasible for common shareholders to attend shareholder meetings in person, they can designate another party to vote for them (vote by proxy). Statutory dictates that each share represents one vote, while cumulative voting is often used to allow smaller shareholders to vote multiple times for a single candidate with each share.

A company can issue multiple common shares with different voting rights and/or other ownership rights. For example, callable common shares give the issuing company the option of buying back the shares at a certain price (typically done when market price rises above strike price), and putable common shares give investors the option of selling back to the company at a certain price (typically when the market price drops below strike price).

### **Preference Shares**

Preference shares have priority to common shares with respect to the payment of dividends and claim on net assets upon liquidation but do not share in the company's operating performance and do not typically have voting rights. While preference shares differ from debt securities in

that the issuing company is not obligated to pay dividends, preference share dividends are often fixed like interest payments on debt securities and generally yield more than dividends paid on common shares.

With cumulative preference shares, the accrued preference dividend payments must be paid before any dividends go out to common shareholders. With participating preference shares, shareholders receive an additional dividend if the company's profits exceed a pre-specified level. Preference shares may also be convertible, meaning they can be converted into common shares at a certain ratio determined at issuance.

## Question

What is the most likely reason for an investor to choose a company's preference shares over its common shares?

- A. The preference shares offer increased voting rights.
- B. The preference shares usually have a higher dividend yield than the common shares.
- C. The preference shares give the investor more exposure to the company's upside potential.

## Solution

The correct answer is **B**.

The preference shares usually have a higher dividend yield than the common shares to make up for the fact that they don't offer voting rights.

**A is incorrect.** Preference shares usually do not have voting rights.

**C is incorrect.** Since even participating preference shares offer limited upside potential, common shares should offer investors more exposure on the upside.

## LOS 4b: describe differences in voting rights and other ownership characteristics among different equity classes

In addition to issuing common or preference shares, companies can also issue different classes of these shares to further tailor the securities to the needs of the company and its investors.

### Common Shares

- **Voting rights:** different classes of common shares may vary significantly in the amount of voting power they offer shareholders. For example, a class of common stock may make up a small minority of the equity stake but still allow its shareholders to maintain control over a company due to differing voting rights.
- **Liquidation proceeds:** different classes of common shares may differ in priority and amount of proceeds to be received by shareholders in the event of a liquidation.
- **Callable/putable:** certain common shares may be callable by the issuer or putable by the investor.
- **Other ownership rights:** classes of common shares may also differ in dividend payments, conversion rights, and rights in the event of a split or subdivision of another class of shares.

### Preference Shares

- **Cumulative:** preference shares may differ in their rights to accumulated unpaid dividends.
- **Participating:** preference shares may differ in their rights to receive a bonus dividend payment if the company's profits exceed a pre-specified level.
- **Convertible:** some preference shares may be convertible into common shares at a ratio determined at issuance.

## Question

What type of preference share is *likely* to give the investor the most exposure to a company's upside potential?

- A. Convertible.
- B. Cumulative.
- C. Participating.

## Solution

The correct answer is **A**.

There is no limit to the potential upside of convertible preference shares since they are convertible to common shares at a fixed ratio.

**B is incorrect.** Cumulative preference shares may help an investor recover lost income if a company is returning to profitability, but ultimately shareholders capture minimal returns on the upside.

**C is incorrect.** Similarly, participating shares are limited to a fixed bonus dividend on the upside.

## **LOS 4c: distinguish between public and private equity securities**

The public securities market is still significantly larger than the private securities market, but investments in private equity have rapidly increased over the last few decades. Because of the size of public securities markets and to protect less sophisticated investors, the public markets tend to be much more regulated than the private markets. Due to the additional scrutiny, public firms are incentivized to ensure shareholders that management is acting in their best interests. Some evidence has shown that corporate governance is more effective at public firms than at private firms. Generally, public securities have much more active secondary markets where investors can easily and cheaply sell their securities at market prices.

This is not the case for private securities, which are often highly illiquid and traded through negotiations with other investors. However, investors in the private markets expect to be compensated with higher returns for the additional limitations. Most investors gain exposure to the private markets through venture capital (start-up financing to early-stage companies), leveraged buyouts (taking companies private), or private investments in public equity (private purchases of secondary offerings by public firms). By going private, management can adopt a more long-term focus and eliminate costs related to public disclosure instead of struggling to meet quarterly targets.

## Question

Why might a pension fund decide to increase its allocation to private securities and reduce its allocation to public securities?

- A. To increase the fund's expected return.
- B. To reduce overall transaction costs and management fees.
- C. To increase the fund's liquidity in order to pay out future short-term obligations.

## Solution

The correct answer is **A**.

A move to more investments in private securities would likely reduce the fund's liquidity and increase transaction costs and management fees. However, most investors expect higher returns from their private security investments than public security investments.

## **LOS 4d: describe methods for investing in non-domestic equity securities**

Along with the technological advancements in recent decades, it has become significantly easier for investors to make international investments at low costs. Similarly, international issuers are now more capable of raising money from foreign investors. This increase in global investment has allowed many emerging markets to develop and stabilize their economies. Investments in non-domestic equity securities can be made directly or through depositary receipts, global registered shares, or baskets of listed depositary receipts.

### **Direct Investment**

Direct investing involves buying and selling securities directly in foreign markets, meaning that all the transactions are in the company's, not the investor's, domestic currency. Investing directly in foreign securities may result in less transparency and more volatility as audited financial information may not be provided, and the market may be less liquid.

### **Depository Receipts**

A depository receipt is a security that trades like an ordinary share on a local exchange and represents an economic interest in a foreign company. A depository receipt is created when foreign equity shares are deposited in a bank that then issues receipts representing the deposited shares.

Depository receipts sponsored by the issuing company grant investors the same rights as direct owners in common shares and are usually more regulated, while unsponsored receipts do not give investors voting rights. There are two main types of depository receipts:

- **Global Depository Receipt (GDR):** issued outside the company's home country and outside the United States. GDRs are not subject to foreign ownership and capital flow restrictions that the issuing company's home country may impose. The majority of GDRs are denominated in US dollars.



- **American Depositary Receipt (ADR):** a US dollar-denominated security that trades like a common share on US exchanges. There are four primary types of ADRs, with each type having different levels of corporate governance and filing requirements.

## **Global Registered Share (GRS)**

A global registered share is a common share traded on different stock exchanges around the world in different currencies. GRSs are more flexible than depository receipts because they represent an actual ownership interest and can be traded anywhere without currency conversion.

## **Basket of Listed Depository Receipts (BLDR)**

A BLDR is an exchange-traded fund that represents a portfolio of depository receipts. These securities can allow investors to gain broader exposure to a foreign market and easily implement hedging or arbitrage trading strategies.

## Question

You're an investor based in the US who wants to invest in non-domestic equity securities without exchanging your US dollars for foreign currency. What type of investment should you avoid?

- A. Direct investments.
- B. Global registered shares (GRS).
- C. American depository receipts (ADR).

## Solution

The correct answer is **A**.

You can buy ADRs and GRSs with your US dollars, but cannot make direct investments in foreign equities without first converting your currency.

## **LOS 4e: compare the risk and return characteristics of different types of equity securities**

The type of security and its features affect its risk/return profile. Therefore, as an investor's risk increases, its expected return should also increase to compensate.

### **Equity Return Characteristics**

There are two main sources of total return for equity securities – capital appreciation and dividend income:

$$\text{Total Return} = \frac{P_1 - P_0 + D}{P_0}$$

Where:

$P_1$  = Sale price (or price at  $t = 1$ )

$P_0$  = Purchase price (or price at  $t = 0$ )

$D$  = Dividend income paid to the investor between  $t = 0$  and  $t = 1$

**Exam tip:** Most of the return calculations in finance follow the same logic:

$$\text{Return (\%)} = \frac{\text{Ending price} - \text{Beginning price} + \text{Dividend income}}{\text{Beginning price}}$$

### **The Reinvestment of Dividends**

Historically, the reinvestment of dividend income has been an extremely important source of compound growth. Of course, the total return of non-dividend paying stocks is entirely based upon capital appreciation.

Direct investments in foreign securities or depository receipts have an additional source of return: foreign exchange gains (or losses) arising from changes in exchange rates.

## Equity Risk Characteristics

In general, investors expect lower risks and returns from preference shares than common shares because dividends on preference shares are fixed.

Preference shareholders also have priority to dividend payments, and liquidation proceeds claimed by preference shares are known (although not guaranteed).

Preference shareholders usually expect more of their total return from dividend income, while common shareholders typically expect more return from capital appreciation.

Callable common or preference shares are riskier than their non-callable counterparts, while puttable common or preference shares are less risky than their non-puttable counterparts.

## Question

A US investor makes a direct investment in a foreign equity security with a current dividend yield of 2.5%. If the investor holds the stock for ten years, how many components are likely to make up the investor's total return?

- A. One
- B. Two
- C. Three

## Solution

The correct answer is **C**.

The investor should earn a total return made up of capital appreciation, dividend income, and foreign exchange (gains or losses).

## **LOS 4f: explain the role of equity securities in the financing of a company's assets**

Companies issue equity securities in the primary markets to raise capital and increase liquidity. Having public shares also gives the company another currency to make acquisitions with or incentivize employees.

Raising capital aims to maximize shareholder wealth, which may be done through financing the purchase of long-lived assets, capital expansion projects, research and development, and/or the entry into a new product or geographic region. In some rare cases, capital is raised only to keep a company operating as a going concern.

## **LOS 4g: distinguish between the market value and book value of equity securities**

The book value of a company's equity reflects the historical operating and financing decisions of its management. The market value of the company's equity reflects these decisions as well as investors' collective assessment and expectations about the company's future cash flows generated by its positive net present value investment opportunities.

As such, book value only looks at the company's past, while market value should be based on the company's future. If a company has a high price-to-book ratio (market price per share divided by book value of equity per share) relative to its industry peers, the market likely has high growth expectations for the company. It doesn't make sense to compare the P/B ratios of companies within different industries because market prices also reflect the growth opportunities of the industries as a whole, which may differ significantly.

## Question

Company	P/B
Toyota	1.25
Ford	1.58
Tesla	11.65

Based solely on the P/B ratio, which auto company is *likely* to have the *least attractive* opportunities for growth?

- A. Ford.
- B. Tesla.
- C. Toyota.

## Solution

The correct answer is **C**.

Because Toyota has the lowest current P/B ratio, the market is placing the lowest value on the company's future growth opportunities. On the other hand, the market has high growth expectations for Tesla.



## **LOS 4h: compare a company's cost of equity, its (accounting) return on equity, and investors' required rates of return**

Required rates of return describe the reward investors expect from taking on a given level of risk.

### **Cost of Equity**

The cost of equity is the minimum expected rate of return that a company must offer its investors to purchase its shares in the primary market and maintain its price in the secondary market. The cost of equity is often found using CAPM:

$$E(R_i) = R_f + \beta_i[E(R_m) - R_f]$$

but could also be calculated using other models, which we will see in the section Equity Valuation: Concepts and Basic Tools.

### **Return on Equity (ROE)**

Return on Equity is the primary measure that equity investors use to determine whether a company's management is effectively and efficiently using the capital that the owners have provided to generate profits. Return on equity is calculated by taking net income and dividing it by the average book value of equity.

$$ROE = \frac{NI_1}{(BV_1 + BV_0)/2}$$

Where:

$NI_1$  = Net income at year end

$BV_1$  = Ending book value

$BV_0 = \text{Beginning book value}$

The average book value of equity is used in cases where a company's book value tends to be volatile from year to year or when it is the industry standard. Otherwise, basing ROE on the beginning book value of equity can also be appropriate.

## **Required Rate of Return**

Investors' required rate of return on debt securities is simply the interest rate on the company's bonds. Thus, the cost of debt is equal to the debt investors' minimum required rate of return.

Investors' required rate of return on equity securities is more difficult to pin down. An equity investor's minimum required rate of return is based on the future cash flows they expect to receive, which are uncertain and must be estimated. The minimum required return may differ across investors, resulting in a cost of equity that differs from the minimum required return of some investors.

## Question

ABC Corp generated a 15% return on equity during 2017. The 2017 beginning and ending book values of equity were the same. In 2018, ABC Corp reported a 15% increase in net income and a 15% increase in the book value of equity from one year prior. Using the average book value of equity approach, what was ABC's 2018 return on equity?

- A. Exactly 15%.
- B. Less than 15%.
- C. Greater than 15%.

## Solution

The correct answer is **C**.

Since return on equity is being based on the average book value of equity, the full 15% increase in the book value of equity is not being accounted for in the denominator. Because the beginning and ending book values are averaged together, the average book value used in the calculation would only be 7.5% higher than the same figure in 2017.

Net income, however, increases exactly 15%. The 2017 return on equity was 15%, and 2018 net income increased more than the average book value of equity so therefore 2018 ROE is greater than 15%.