

EQUITIES

CFA[®] Program Curriculum
2027 • LEVEL I • VOLUME 5

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How to Use the CFA Program Curriculum

The CFA® Program exams measure your mastery of the core knowledge, skills, and abilities required to succeed as an investment professional. These core competencies are the basis for the Candidate Body of Knowledge (CBOK™). The CBOK consists of four components:

A broad outline that lists the major CFA Program topic areas (www.cfainstitute.org/programs/cfa/curriculum/cbok/cbok)

Topic area weights that indicate the relative exam weightings of the top-level topic areas (www.cfainstitute.org/en/programs/cfa/curriculum)

Learning outcome statements (LOS) that tell you the specific knowledge, skills, and abilities you should gain from each curriculum topic area. You will find these statements at the start of each learning module and lesson. We encourage you to review the information about the LOS on our website (www.cfainstitute.org/programs/cfa/curriculum/study-sessions), including the descriptions of LOS “command words” on the candidate resources page at www.cfainstitute.org/-/media/documents/support/programs/cfa-and-cipm-los-command-words.ashx.

The CFA Program curriculum that candidates receive access to upon exam registration.

Therefore, the key to your success on the CFA exams is studying and understanding the CBOK. You can learn more about the CBOK on our website: www.cfainstitute.org/programs/cfa/curriculum/cbok.

The curriculum, including the practice questions, is the basis for all exam questions. The curriculum is selected/developed specifically to provide candidates with the knowledge, skills, and abilities reflected in the CBOK.

CFA INSTITUTE LEARNING ECOSYSTEM (LES)

Your exam registration fee includes access to the CFA Institute Learning Ecosystem (LES). This digital learning platform provides access to all the curriculum content and practice questions. The LES is organized as a series of learning modules consisting of short online lessons and associated practice questions. This tool is your source for all study materials, including practice questions and mock exams. The LES is the primary method by which CFA Institute delivers your curriculum experience. Here, you will find additional practice questions to test your knowledge, including some interactive questions.

DESIGNING YOUR PERSONAL STUDY PROGRAM

An orderly, systematic approach to exam preparation is critical. You should dedicate a consistent block of time every week to reading and studying. Review the LOS both before and after you study curriculum content to ensure you can demonstrate

the knowledge, skills, and abilities described by the LOS and the assigned learning module. Use the LOS as a self-check to track your progress and highlight areas of weakness for later review.

Successful candidates report an average of more than 300 hours preparing for each exam. Your preparation time will vary based on your prior education and experience, and you will likely spend more time on some topics than on others.

ERRATA

The curriculum development process is rigorous and involves multiple rounds of reviews by content experts. Despite our efforts to produce a curriculum that is free of errors, we must make corrections in some instances. Curriculum errata are periodically updated and posted by exam level and test date on the Curriculum Errata webpage (www.cfainstitute.org/en/programs/submit-errata). If you believe you have found an error in the curriculum, you can submit your concerns through our curriculum errata reporting process found at the bottom of the Curriculum Errata webpage.

OTHER FEEDBACK

Please send any comments or suggestions to info@cfainstitute.org, and we will review your feedback thoughtfully.

Equities

LEARNING MODULE

1

Equity Instrument Features

LEARNING OUTCOMES

| <i>Mastery</i> | <i>The candidate should be able to:</i> |
|--------------------------|---|
| <input type="checkbox"/> | describe basic features and types of equity instruments |
| <input type="checkbox"/> | contrast features of publicly listed versus private equity securities |

INTRODUCTION: EQUITY INSTRUMENT FEATURES

1

Equity instruments, such as common and preferred shares, are securities that represent an investor's fractional ownership in a company. Issuers of equities include publicly listed and private corporations whose owners (i.e., shareholders) receive economic, voting, and legal rights over an indefinite period. Equity investors may receive a proportional share of any distributions made at the issuer's discretion, participate in electing a company's board and decide on important corporate actions, and have a legal claim to remaining company assets upon liquidation once debtholder claims have been satisfied.

Equity securities represent a standardized form of legal ownership and are a core investment for many asset managers, pension funds, and individual investors seeking capital appreciation and income. According to the World Federation of Exchanges, a global industry association for exchanges and clearinghouses, the global market value of publicly listed equity securities exceeds USD100 trillion—nearly 40% of which is US based, followed by the Chinese Mainland, the European Union, and developing or emerging markets, each of which are currently close to 11%. Equities have historically generated the highest long-term returns among major asset classes. Global equity markets are second in size only to fixed-income markets, which are covered in later learning modules. This module introduces the features of equity instruments and compares publicly listed versus private equity investments.

PRE-TEST: EQUITY INSTRUMENT FEATURES

1. Which of the following is the most common characteristic of preferred equity?
- A. Preferred shares represent a claim that is senior to common shares in the company.
 - B. Preferred shares allow holders to participate in the company's shareholder voting process.
 - C. Preferred shares allow holders to only receive dividends at the company's discretion.

Solution:

Choice A is correct. Preferred stock is a more senior claim than common shares.

Choice B is incorrect as preferred shareholders generally do not participate in the company's shareholder voting process.

Choice C is incorrect as preferred shareholders commonly receive non-discretionary, as opposed to discretionary, dividends.

2. The ownership of equity in publicly listed firms is typically characterized by which one of the following?
- A. Firms with publicly held equity typically have few owners with very large ownership stakes.
 - B. Firms with publicly held equity must generally meet legal, regulatory, and compliance requirements of the markets where they trade.
 - C. Firms with publicly held equity are typically much smaller than those with privately held equity.

Solution:

Choice B is correct. Firms with publicly held equity must generally meet legal, regulatory, and compliance requirements of the market where they trade.

Choice A is incorrect as this statement better describes ownership of private equity companies.

Choice C is incorrect as this statement also better describes ownership of private equity companies.

3. Which one of the following statements most correctly reflects a description of preference shares?
- A. Preference shares must be either callable or puttable.
 - B. Preference shares typically have voting rights.
 - C. Preference shares cannot benefit from improved operating performance of the company.

Solution:

Choice C is correct. While preference shares often do not benefit from improved operating performance of the company, these shares may include features that allow for such benefits. Examples include participating preferred or convertible preferred.

Choice A is incorrect. Preference shares do not have to be either callable or puttable.

Choice B is incorrect as preference shares typically do not provide voting rights.

4. Participating preference shares typically entitle shareholders to:

- A. participate in the decision-making process of the company.
- B. convert their shares into a specified number of common shares.
- C. receive an additional dividend if the company's profits exceed a predetermined level.

Solution:

Choice C is correct. Participating preference shares entitle shareholders to receive an additional dividend if the company's profits exceed a predetermined level.

Choice A is incorrect as this statement implies voting rights.

Choice B is incorrect as this statement implies the ability to convert preferred shares into common shares.

5. Which of the following statements about private equity securities is typically correct?

- A. They are commonly sold on secondary markets.
- B. They have public market determined quoted prices.
- C. They are primarily issued to institutional investors.

Solution:

Choice C is correct. Private equity securities are primarily issued to institutional investors.

Choice A is incorrect as private equity securities are not commonly sold on secondary markets.

Choice B is incorrect. Private equity securities do not have public market determined quoted prices.

6. Which one of the following statements most accurately describes a difference between private and publicly listed firms?

- A. Private firms are focused more on short-term results than publicly listed firms.
- B. Private firms are more likely to be in early and growth stages of the company life cycle than publicly listed firms.
- C. Private firms face higher regulatory constraints than publicly listed firms.

Solution:

Choice B is correct. Companies in early life-cycle stages are more likely to be unable to meet public listing requirements, so they are more likely to be private than publicly listed.

Choice A is incorrect as the lack of public financial disclosures and observable share prices allows private equity firms to focus relatively less attention on short-term results as compared to publicly listed firms.

Choice C is incorrect as private equity firms face fewer regulatory constraints than publicly listed firms.

2

EQUITY INSTRUMENT FEATURES

- describe basic features and types of equity instruments

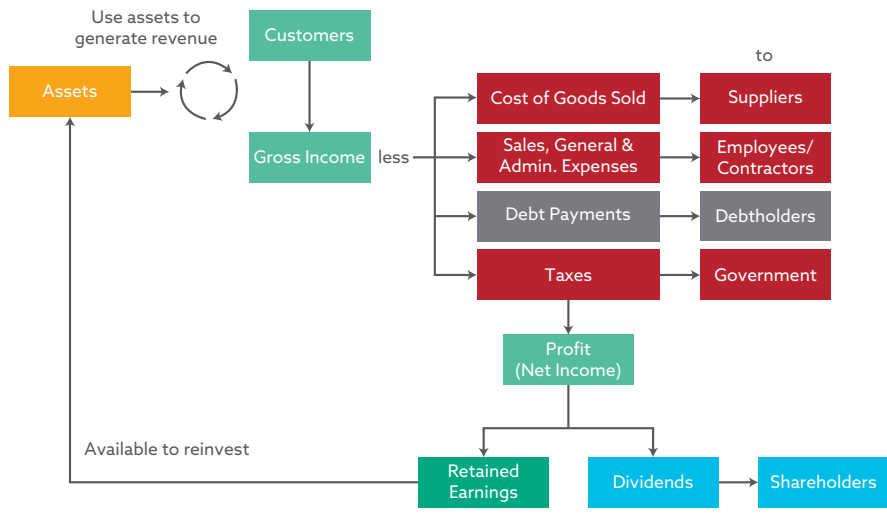
Equity instruments are securities that represent a standardized form of company ownership capital. In contrast to sole proprietorships in which the firm's owner supplies equity capital and manages company operations, equity securities in other organizational forms offer several advantages to issuers and investors (as described in earlier Corporate Finance learning modules) as they:

- enable greater transferability of shares,
- expand access to additional external capital, and
- limit the legal liability of owners.

Share ownership represents a fractional stake in an issuer, which is typically a publicly listed or private corporation, granting shareholders specific economic rights and voting rights. Equity investors are owners with the right to receive any distributions as well as net proceeds from the sale of a division or a full dissolution of the company. They may also exercise voting rights on major corporate decisions, such as the election of the board of directors.

Unlike debt securities with a defined maturity, equity securities are outstanding for an indefinite period—that is, until a corporate restructuring event (such as an acquisition or divestiture) occurs, in which shareholders receive either another stock or cash in exchange for their ownership rights, or the firm is liquidated. In contrast to debt, firms issuing equity instruments are neither contractually obligated to repay funds received from shareholders nor to make any periodic payments to shareholders. Instead, common shareholders receive a proportional share of any net income distributed at the company's discretion and have a residual claim on the company's assets upon liquidation once all debts and preferred shareholders have been paid. Exhibit 1 compares the position of equity claims to those of other stakeholders.

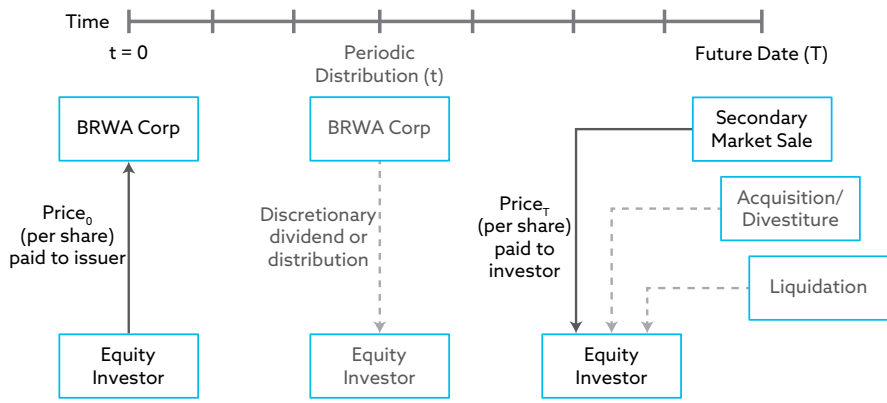
Exhibit 1: Equity versus Other Stakeholder Claims



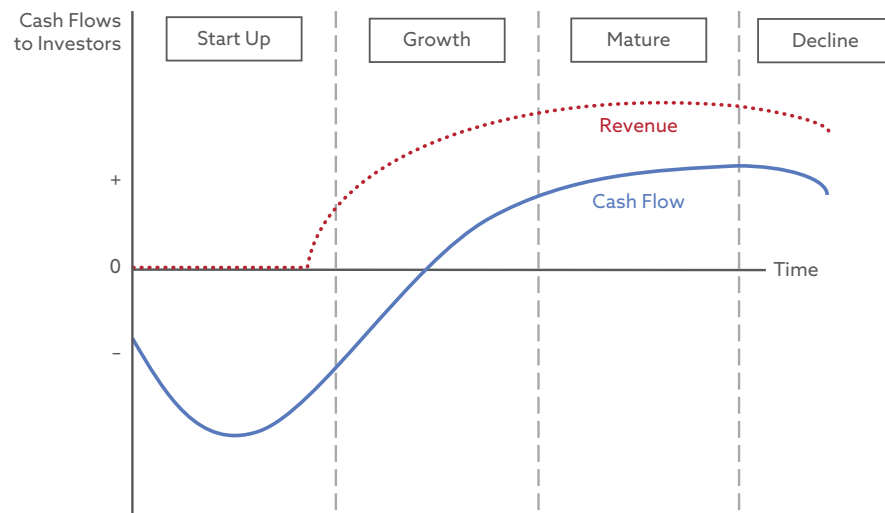
Once all other stakeholder claims are satisfied, net income is either retained and reinvested in the firm or distributed to its shareholders. Such discretionary net income distributions to shareholders on a periodic basis are **dividends**, which a firm may pay to shareholders regularly, occasionally, or not at all.

Exhibit 2 shows the cash flows for an equity security issued by Bright Wheels Automotive (BRWA) Corporation.

Exhibit 2: BRWA Corporation Equity Cash Flows



If BRWA does not pay periodic dividends and is not subject to restructuring or liquidation, then an investor's return will consist solely of price appreciation or depreciation. The distinction between shares that pay a regular dividend and non-dividend-paying stocks is important for equity investors in assessing the type and expected timing of future cash flows. A key factor affecting a firm's dividend policy is its stage in the company life cycle. The following exhibit shows how cash flows to investors vary over company life-cycle stages.

Exhibit 3: Company Life-Cycle Stages

Start-up and growth companies tend to either generate net losses and therefore no earnings to distribute, or they generate low but growing earnings and cash flows, which are often fully retained and invested internally in expansion and new business opportunities. Equity investors during these life-cycle stages typically seek long-term capital appreciation over current income.

As earning growth slows, mature companies with stable cash flows and fewer new investment opportunities are more likely to regularly distribute a portion of earnings to shareholders. Equity investors seeking recurring income while retaining price appreciation potential often choose mature company stocks, which pay a regular dividend. For example, while around half of the companies in the NASDAQ-100 Index dominated by younger technology companies pay no dividend, over three-quarters of the firms included in the more diversified S&P 500 Index regularly distribute dividends to investors. The following case study highlights the example of an early-stage company's debut on the NASDAQ exchange as a publicly traded stock.

RIVIAN'S INITIAL PUBLIC OFFERING (IPO)

Rivian Automotive, a US-based electric vehicle manufacturer, successfully completed an initial public offering (IPO) of common stock on 10 November 2021. It was the largest US IPO since Alibaba listed its shares in 2014. Rivian sold around 153 million shares of Class A common stock at an IPO price of USD78 per share. The company raised approximately USD12 billion to fund capital to build one million vehicles per year by the end of the decade. Investor demand for Rivian shares showed considerable strength immediately after the firm's shares began trading as investors expected significant price growth.

Rivian's management focus on growth as opposed to shareholder dividends was evidenced by the IPO prospectus, in which the firm states: "We have never declared or paid any cash dividends on our capital stock. We currently intend to retain all available funds and future earnings, if any, for the operation and expansion of our business and do not anticipate declaring or paying any dividends in the foreseeable future."

The **equity prospectus** (or, in the case of private placements, offering memorandum) is distributed to prospective investors coinciding with share issuance. This document outlines the key features of equity securities along with the use of proceeds, details of the issuer's business, risk factors, management discussion and analysis, management and key shareholders, and financial information.

It is important to distinguish between the types of equity instruments being used. The two most widely used are **common shares** (also known as ordinary shares or common stock) and **preference shares** (also known as preferred stock). Common shares involve an ownership interest in a company that entitles an investor to both economic and voting rights, while preference shares involve economic rights but typically no voting rights. Preference shares represent claims that are subordinate to all debt instruments but are senior to common equity, and they may pay periodic dividends. Like common shares, preference shares are outstanding for an indefinite period.

Unlike fixed-income instruments and preference shares that have a specific par value, common shares are issued as distinct units that represent an investor's fractional claim on the issuer's assets less liabilities. This fractional claim may change as the number of shares outstanding changes. The economic and voting rights associated with common stock are as follows:

- *Voting Rights:* Specifies an investor's proportional right to participate in corporate governance decisions.
- *Dividend Rights:* Specifies an investor's proportional right to any regular or extraordinary distributions of net income or assets.
- *Conversion Rights:* Addresses any rights an equity investor may have to exchange one class or type of equity security for another.
- *Liquidation Rights:* Addresses an investor's proportional claim to the distribution of net assets remaining if the corporation is dissolved, assets are sold, and proceeds are distributed based upon the priority of claims.
- *Split, Subdivision, or Combination Rights:* Addresses any changes to an investor's proportional claim if shares are split, subdivided, or combined.
- *Preemptive Rights:* Describes any preferential claims for existing investors to purchase newly issued equity securities or securities convertible into equity.

For example, Exhibit 4 summarizes the terms of BRWA's Class A common shares.

Exhibit 4: BRWA Corporation Common Stock – Brief Summary of Terms

[20,000,000 Shares Bright Wheels Automotive Corporation] Class A Common Stock

| | |
|---------------------------------|--|
| Issuer: | Bright Wheels Automotive Corporation |
| Number of shares issued: | 20,000,000 |
| Voting rights: | Holder of Class A common stock are entitled to one vote per share. |
| Dividends: | Stockholders of Class A common stock will share proportionally in any cash dividend declared by the Board of Directors, subject to any preferential rights of any outstanding preferred stock. |

**[20,000,000 Shares Bright Wheels Automotive Corporation]
Class A Common Stock**

| | |
|----------------------------|---|
| Liquidation rights: | In the event of liquidation, dissolution, or winding-up of the issuer, all stockholders of common stock, regardless of class, will be entitled to share ratably in any assets available for distributions to stockholders of shares of the issuer's common stock subject to the preferential rights of any outstanding preferred stock. |
| Preemptive rights: | Shares of Class A common stock do not entitle a stockholder to any preemptive rights enabling a stockholder to subscribe for or receive shares of stock of any class or any other securities convertible into shares of stock of any class. |

Common Shares

Common shares are the predominant type of equity security. These shares offer an investor both economic and voting rights. Economic rights include a proportional claim to any dividends or distributions as well as a claim to the firm's net assets in the event of liquidation. Voting rights allow investors to participate in the corporate governance process. Votes are granted in proportion to share ownership unless otherwise specified.

Voting rights provide shareholders with the opportunity to participate in corporate governance decisions, typically including such considerations as the election of its board of directors, the decision to merge with or take over another company, and the ratification of auditors. Shareholder voting generally takes place during a company's annual meeting and may be conducted in person or via **proxy vote**, where a designated third party—another shareholder, a shareholder representative, or management—votes on a shareholder's behalf.

Issuer and investor benefits of common stock include the following:

- *Issuer benefits:* Issuers maintain operational control of the business while exchanging proportional and economic voting rights to investors in exchange for capital.
- *Investor benefits:* Common shares provide investors access to fractional economic and voting rights in corporations with a relatively small capital outlay regardless of the corporation's size. These ownership claims allow investors to benefit from any dividends paid and/or growth in a firm's net asset value, as well as freely buy and sell these claims in the secondary market.

The issuance of common shares may stem from the desire to source public equity capital for expansion, sell a company that has been restructured under private ownership, or diversify family wealth from a concentrated ownership position. From an issuer's perspective, new common shares may alter the company's capital structure and its weighted average cost of capital. As shown in the following case, a new equity issuance often is publicly listed on an **equity exchange** or stock exchange, which is a rules-based, organized, and regulated centralized market venue where eligible market participants regularly meet to trade shares.

BIRKENSTOCK'S (BIRK) INITIAL PUBLIC OFFERING (IPO)

On 10 October 2023, Birkenstock Holdings PLC, a 250-year-old shoe manufacturer based in Germany, issued around 32 million shares listed on the New York Stock Exchange priced at USD46 per share. Of the USD1.5 billion of stock sold, only about a third represented new proceeds to the company. The remaining two-thirds of IPO proceeds went to existing shareholders who used the offering to sell ownership stakes in the now-public company. Birkenstock

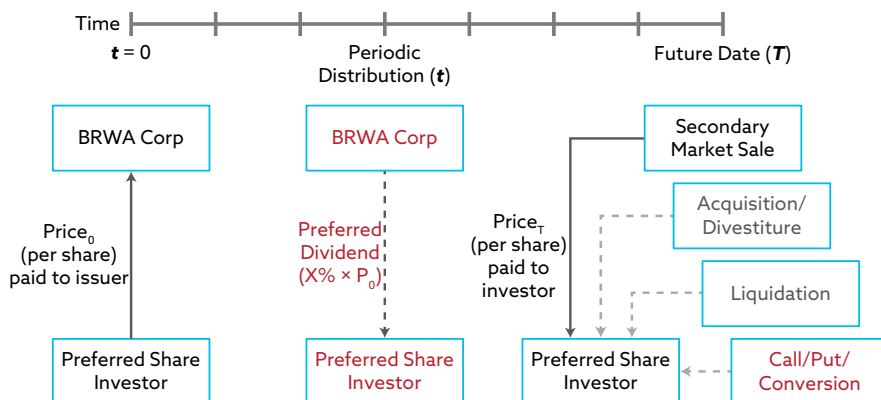
was owned and managed by the namesake family until 2012, when two brothers, Alex and Christian Birkenstock, transferred senior management responsibilities to a long-time company employee along with a company outsider. In 2021, the Birkenstock brothers sold a majority ownership stake to a private equity firm. The 2023 IPO was the final stage of a process in which the family was able to diversify its wealth from the renowned footwear brand.

Preference Shares

Preference shares (or preferred stock) have characteristics of both debt securities and common shares. Preference shareholder claims are senior to those of common shareholders. Like fixed-debt coupons, preference share dividends are a fixed percentage of the **preference share par value** (or original asking price) of each preferred share.

Unlike the failure to make timely scheduled debt payments, deferral of preference dividend payments does not constitute a default on a contractual obligation of the company. As in the case of common shares, preference shares may be perpetual (i.e., have no fixed maturity date) and may pay dividends indefinitely. For example, Exhibit 5 shows the cash flows for preferred shares issued by BRWA Corporation.

Exhibit 5: BRWA Corporation Preferred Share Cash Flows



Preference shares rank above common shares with respect to dividend payments and the distribution of the company's net assets upon liquidation. However, preference shareholders generally do not share in the operating performance of the company and lack voting rights, unless explicitly allowed for upon issuance. Preferred dividends provide investors with income that typically exceeds common stock dividends. However, preferred shares do not offer the same capital appreciation potential as common stock.

Fixed preferred dividends do not typically rise or fall with company performance, as is generally the case with common shares, and they are often **cumulative preferred shares**—that is, unpaid preferred dividends accrue and must be paid before common dividends can be issued.

Issuers frequently offer beneficial contingency provisions to investors, such as participation in improved performance and downside protection, to attract preferred shareholders. For example, **participating preferred shares** provide shareholders the opportunity to receive an additional dividend if company profits exceed a prespecified level. Alternatively, preferred shareholders may seek protection against weaker firm performance by negotiating the right to receive a minimum price for their shares or a fixed payout if the firm is dissolved.

In contrast to these standard features of preference shares, the following ownership stakes sometimes incorporate additional contingency provisions that may benefit the issuer or investor. For example, in the case of **callable preference shares**, the issuer has the right, but not the obligation, to repurchase preferred shares at a predetermined price. **Puttable preference shares** grant investors the right, but not the obligation, to sell preferred shares back to the issuer at a predetermined price referred to as the **put contingency price**. In the case of liquidation, a predefined distribution of cash proceeds to preferred shareholders in advance of any common shareholder payments is referred to as a **liquidation preference payout**.

CASE STUDY



BRWA Preference Share Issuance

BRWA Corporation issues 50,000 puttable preference shares at par value of USD100 per share. Dividends are payable annually at a rate of 5% of par value. BRWA's preferred dividend is cumulative, and the put contingency price is set at 90% of par value. In the year following the issuance of these shares, BRWA's operating performance declines such that the company faces difficulties in paying the preferred dividend.

1. Which one of the following statements is most correct about BRWA's preferred dividend?
 - A. BRWA must borrow sufficient funds to ensure that the preferred dividend cannot fall below USD4.50 per share annually.
 - B. BRWA can skip a preferred dividend payment but must make the payment in the future before it may pay common dividends.
 - C. The put contingency allows BRWA to sell additional preferred shares to fund the preferred dividend of USD5.00 per share.

Solution:

Choice B is correct. The cumulative feature of BRWA's preference shares allows dividend payments to be deferred. However, preferred dividends paid must include any missed dividend payments from prior years before the company is allowed to pay a common stock dividend.

Choice A is incorrect because the statement incorrectly implies that the dividend cannot fall below 90% of the dividend rate of 5%. This is an incorrect interpretation of the put contingency.

Choice C is incorrect as this statement also provides an incorrect statement regarding the put contingency. The put contingency provides the investor with the right to sell BRWA preference shares to BRWA at a price of USD90 per share.

In some situations, it can be advantageous for issuers and investors to consider preferred shares that include the contingent right to change into common shares in the future. For example, closely held, early-stage business ventures with financing needs can lower costs and avoid relinquishing current ownership control by issuing preferred instead of common shares. Debt financing is rarely available to companies with little to no revenue, no assets that can be used as loan collateral, and limited cash flow from operations. However, investors may be willing to purchase a debt-like security in exchange for the right to participate in ownership and future capital appreciation if the business performs well. **Convertible preference shares** entitle shareholders to exchange preference shares into a specified number of common shares (and in some cases at a predetermined price) agreed upon issuance in the future. By granting this

future right to investors, issuers can raise capital at a lower cash cost (that is, at a lower dividend than a standard preferred share) than equity today prior to issuing public equity securities in an initial public offering (IPO).

CASE STUDY**BRWA and Convertible Preference Shares**

In assessing the possibility of issuing preference stock, BRWA considered the use of convertible preference shares.

1. Which statement below most correctly reflects the benefit to BRWA and the benefit to investors if BRWA had issued convertible preference shares as opposed to preference shares with no contingency features?
- A. BRWA benefits by not selling an ownership stake in the company, and investors benefit by receiving downside risk protection.
 - B. BRWA benefits by selling a contingent ownership stake in the company, and investors benefit by receiving a higher dividend rate.
 - C. BRWA benefits by paying a lower dividend rate, and investors benefit by receiving the option to convert the preference shares into common shares if BRWA's stock performs well.

Solution:

Choice C is correct. The convertible contingency provides preference share investors with the option to convert these shares into common stock, thus providing investors with some upside gain potential if BRWA performs well. Investors effectively pay for this option by agreeing to receive a lower dividend, which creates a benefit for BRWA.

Choice A is incorrect because investors do not receive downside risk protection. Additionally, BRWA may not have sold a current ownership stake, but they have sold a contingent ownership stake if investors convert the preference shares into common shares.

Choice B is incorrect because investors receive a lower, not higher, dividend rate in exchange for buying convertible preference shares.

Key features of common versus preference shares as compared to debt are summarized below in Exhibit 6.

Exhibit 6: Features of Common Shares, Preference Shares, and Debt

| Features | Common Shares | Preference Shares | Debt |
|-------------------------------|---|--|---|
| Contractual obligation | No | No | Yes |
| Economic rights | Residual claimant; Highest uncertainty of payoffs | Senior to common shares; Less uncertainty of payoff than common shares; Dividends are more debt-like | Senior to preference shares; Least uncertainty of payoff than common or preferred |
| Voting rights | Yes | Rarely | No |
| Time to maturity | Indefinite life | Indefinite life | Finite maturity |

QUESTION SET

1. Which one of the following most correctly describes the features of common shares?
- A. Contractual obligation with finite maturity and rights to vote on corporate decisions
 - B. Non-contractual obligation with indefinite maturity and rights to vote on corporate decisions
 - C. Non-contractual obligation with finite maturity and rights to vote on corporate decisions

Solution:

Choice B is correct. Common stock is not a contractual obligation. It has no defined maturity date and provides holders with voting rights on corporate decisions.

Choice A is incorrect because common stock is not a contractual obligation with finite maturity.

Choice C is incorrect because common stock does not have finite maturity.

2. Which one of the following contingency features of preference shares do *not* provide investors with downside risk protection?
- A. Participating
 - B. Puttable
 - C. Liquidation preference

Solution:

Choice A is correct. Participating preference shares provide investors with the opportunity to receive an additional dividend if company profits exceed a prespecified level. Thus, this contingency provides upside gain potential.

Choices B and C are incorrect as both provide protection against downside risk.

3. Which one of the following statements does *not* typically reflect a primary reason why a company may issue publicly listed shares?
- A. To fund company expansion
 - B. To diversify founders' wealth from a concentrated ownership position
 - C. To take advantage of perceived market mispricing of company stock

Solution:

Choice C is correct as this is the least correct response provided. Perceived market mispricing assumes market inefficiency in that markets will not take into consideration the company's decision to issue shares in their price bids for new shares. While market inefficiency may exist, the other two statements better reflect company rationales for issuing shares.

Choice A is incorrect as the funding of expansion is a common rationale for issuing public shares.

Choice B is incorrect as IPOs are frequently used as a way for the early-stage owners, such as founders and/or family members, to be able to sell their previously illiquid shares.

PUBLICLY LISTED VERSUS PRIVATE EQUITY SECURITIES

3

- | contrast features of publicly listed versus private equity securities

Corporations issue publicly traded equity securities to raise capital from equity investors, reduce the ownership concentration of existing private shareholders, or transfer ownership from government to investors in the case of a state-owned corporation. While most small and medium-size firms are privately held by entrepreneurs and unavailable to outside investors, a sizable proportion of the largest firms are publicly listed. Among those equity investments available to investors, the market value of publicly traded firms far exceeds that of the private equity market, although the *number* of private companies exceeds that of public companies, as described below.

SIZE AND SCOPE OF PUBLICLY LISTED VERSUS PRIVATE EQUITY MARKETS

The vast majority of corporations in both developing and developed economies are privately held. For example, of the over 5.7 million corporations in the United States reported by the Census Bureau in 2020, just 0.1% had publicly traded shares. However, publicly issued shares are far more prevalent among larger companies. For example, Forbes lists twelve privately held firms in the United States with revenues greater than USD25 billion in 2023, while over ten times as many publicly listed corporations exist above this revenue threshold.

The rapid growth in capital raised from institutional investors by private equity funds has drawn significant attention to this market, although it remains much smaller than the public market. For example, while the global market for publicly issued equities is approximately USD100 trillion as noted earlier, the global private equity fund market constitutes less than 10% of the overall equity market in the early 2020s, according to the consulting company McKinsey.

The accessibility of exchange-traded markets allows for public company ownership to be widely distributed among individual and institutional shareholders. As publicly listed companies, firms must meet and maintain the equity listing requirements of an exchange. These may involve achieving a specified level of market capitalization, sales, or profits; a minimum number of shareholders; and adherence to standardized financial and non-financial disclosure requirements, such as the periodic distribution of audited financial statements. While publicly listed equities remain dominant in terms of market value, several market forces are key determinants in the number of publicly listed companies, as described below.

PUBLIC EQUITY MARKET LISTING TRENDS

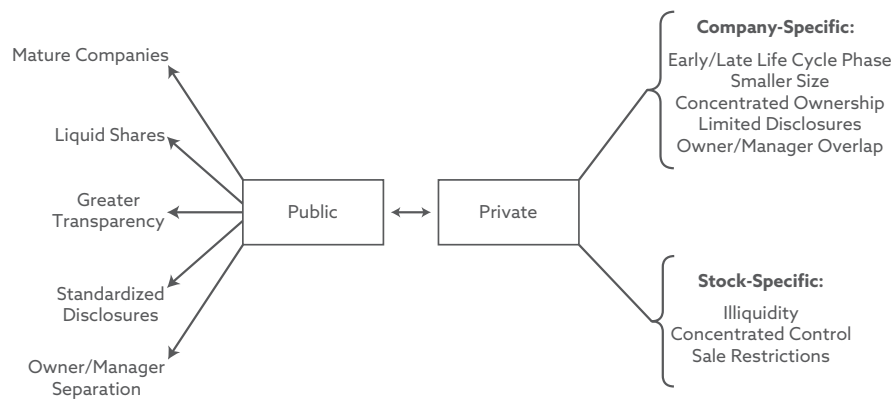
The number and size of equity listings are subject to constant change as firms issue IPOs or delist their shares. For example, the number of companies publicly listed on US stock exchanges reached its peak in 1997. In the following two decades, the number of listed companies fell by over 50%. This decline is in sharp contrast to the approximately 50% growth in US publicly listed companies observed between 1975 and 1997. While this change in public equity listings has been most notable in the United States, other developed markets have also

experienced smaller declines in later years. Private equity investment among institutional investors, on the other hand, has seen significant growth in recent decades from a much smaller base.

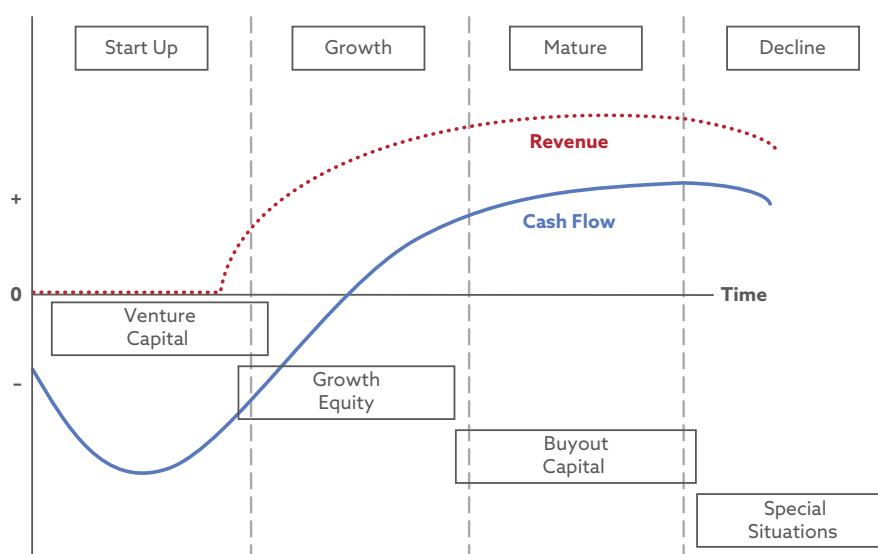
In addition to mergers and acquisitions, more stringent regulations in developed markets have made a public listing less attractive by increasing the costs compared to the benefits. Also, an increase in available capital from private equity investment funds allows for companies to grow larger while remaining private, or for larger publicly listed firms to be acquired by private equity firms.

Private companies range from start-up companies to established single owner operated firms and multigenerational family businesses. Except for entrepreneurs or partners directly contributing ownership capital to an owner-operated firm, private equity investments are far less accessible to individual investors than publicly traded shares. Many large and well-known firms, such as IKEA and the LEGO Group, remain privately held because of their desire to benefit from concentrated ownership and control, which for owner-managed firms includes limiting public disclosure requirements of financial condition. Exhibit 7 contrasts the features of publicly listed versus private companies.

Exhibit 7: Publicly Listed versus Private Company Features



Publicly listed equity securities are usually liquid because they are traded in open and accessible markets, allowing investors to readily buy or sell positions and easily observe current and historical security prices as well as those for relevant benchmarks, such as indexes. Illiquid private equity investments, in contrast, often involve non-standardized terms and trade infrequently on a negotiated basis. Most private companies are relatively small, but those that become sufficiently large to become eligible for an exchange listing often strategically opt to forego access to public equity markets to maintain control or avoid the greater cost and scrutiny associated with public financial disclosures. These private companies usually have few equity investors, with either majority controlling or large minority stakes. Private equity use spans the company life cycle, as shown in Exhibit 8.

Exhibit 8: Private Equity Use over the Company Life Cycle

As shown in Exhibit 8, these private equity fund investments include **venture capital (VC)** for initial development of start-ups as well as buyout equity used to acquire, control, and transform mature companies later sold to private or public investors. In contrast to public equity investors who may buy or sell positions with greater frequency, these private equity fund investments are typically held over multiyear periods with returns realized only upon their sale to a new group of public or private investors.

For example, firms in an early development phase with negative cash flow and little to no revenue are ineligible for a public equity listing and must rely on private capital sources willing to invest in new companies with a high failure rate. Start-up firms often rely on founders, friends and family, and venture capital firms to provide private ownership capital to establish a product and market to reach the next stage of development. Early phase private investment is typically concentrated, with investors who take greater risk and often exercise greater control, as described in the following case study.

RIVIAN'S EARLY-STAGE PRIVATE EQUITY FINANCING

An earlier example described Rivian Automotive's 2021 IPO. The company was founded as Mainstream Motors in 2009 (changing to Rivian Automotive in 2011) by Robert Scaringe, as the sole employee and initial investor, shortly after he earned advanced degrees in mechanical engineering. A car enthusiast with a passion to develop a more sustainable transportation system, Scaringe's ideas for Rivian's electric vehicle models were based on converting standard technology to harness a more environmentally friendly energy source.

Rivian's early capital funding of USD1.25 million consisted of debt and warrants until 2017, when it received an undisclosed investment from the Japanese firm Sumitomo Corporation. In 2019, Rivian raised USD1.5 billion of equity investments from investors, such as Amazon.com, Inc., and Ford Motor Company. Amazon's investment in Rivian was part of the Climate Pledge Fund, a company effort to fund projects seeking net-zero carbon emissions by 2040. Prior to the

IPO, Rivian had raised a total of USD11 billion in several funding stages from a variety of private investors as well as from fund companies, including T. Rowe Price and Third Point.

As described in the above case study, start-up firms often receive multiple rounds of early financing, with investors able to reduce or exit holdings via an initial public offering or acquisition by another company. Alternatively, if a company remains private as it seeks more capital for profitable expansion, a separate group of equity investors in so-called **growth equity** may be used to reduce the concentration of initial investors.

In the case of mature companies, private equity investors may acquire a firm to take control and rapidly transform the company to increase returns. For example, a **leveraged buyout (LBO)** occurs when one or more investors purchase all the outstanding common shares of a publicly traded company. The transaction is referred to as a **management buyout (MBO)** if the group of private equity investors involves a company's existing management. Once fully purchased, often using significant debt financing, the shares cease to trade on an exchange and the investor group takes full control of the company in what is referred to as a **take-private transaction**. These private investors target firms whose assets they consider to be undervalued or may benefit from restructuring or other changes to increase efficiency and generate higher cash flows and profitability once debt costs are included. The objective of buyout equity is to restructure and sell the acquired company, by either issuing new public shares in the primary market or selling existing shares to a publicly listed or private firm. As shown in the following case study, the target of buyout equity may be a private rather than a publicly held company.

THE SALE OF BIRKENSTOCK TO A PRIVATE EQUITY FIRM

The 2023 IPO of Birkenstock Holdings, a 250-year-old German footwear company, was described in an earlier example. Two and a half years earlier, the private family-owned company was acquired for EUR4 billion by L Catterton, a private equity firm funded by the world's largest luxury goods firm LVMH Moët Hennessy Louis Vuitton. LVMH's founder, chair, and CEO, Bernard Arnault, also invested in the acquisition through his family office, Financière Agache. LVMH controls and manages over 70 global luxury brands.

The sale of Birkenstock represented an intermediate step in the family's reduction in ownership and management control of the company. In 2012, the two Birkenstock brothers, Christian and Alex, turned over control of the firm's operations to two co-CEOs, neither of whom were family members (although one was a long-time company employee). The private equity acquisition reduced the family's ownership stake to a relatively small minority position in the firm.

Many companies enter a period of decline as competition or technological advancement causes revenues and cash flow to fall, leading to financial distress. Private equity may enter these **special situations**, which are defined as investments in firms facing financial distress or event-related changes. For example, the shares of a publicly listed company in bankruptcy may be delisted from an exchange if it no longer meets requirements, such as a minimum share price. Alternatively, if a firm facing restructuring or reorganization must quickly raise equity capital to continue operations, it may consider a **PIPE (private investment in public equity) transaction**. Under a PIPE transaction, firms can raise private capital more quickly and with fewer transaction costs than via public equity issuance. This selected group of private investors usually requires an incentive, such as a discounted share price, to participate. This transaction may be subject to existing shareholder approval and may give rise to conflicts between existing and new shareholders given the dilutive nature of such transactions.

CASE STUDY**BRWA PIPE Issuance**

As described in an earlier example, BRWA Corporation issued 20 million public common shares in an IPO. BRWA shares currently trade at USD8. Since its public market debut, BRWA's performance has lagged competitors, and it has lost market share in the traditional gasoline-powered vehicle segment. In response to weaker cash flows in its core business, BRWA management seeks to invest in new models using alternative fuel sources. To pursue this growth initiative, BRWA needs additional equity capital and seeks to complete the financing quickly. Rather than accessing public capital, which would be more time-consuming, BRWA raises new equity capital by selling 2 million shares of stock to several private investors with expertise in alternative energy at a discounted price of USD7 per share through a PIPE transaction.

1. Which one of the following best characterizes BRWA's common equity capital after the PIPE transaction?
 - A. 22 million shares outstanding at USD8 per share
 - B. 22 million shares outstanding at USD7 per share
 - C. 22 million shares outstanding at USD7.91 per share

Solution:

Choice C is correct. By issuing additional common shares at a discounted price, BRWA has diluted the value of their common stock. The company received USD14 million ($= \text{USD}7 \times 2 \text{ million shares}$) in addition to the existing common share capital of USD160 million ($= \text{USD}8 \times 20 \text{ million shares}$). Dividing the sum of these two numbers by 22 million shares gives a diluted value per share of USD7.91 ($= \text{USD}174 \text{ million} \div 22 \text{ million shares}$).

As shown in the above examples, companies often take advantage of both private and public equity markets during different life-cycle phases.

QUESTION SET

1. Which one of the following statements comparing publicly listed and private firms in the United States is most correct?
 - A. Private firms outnumber publicly listed firms by approximately ten times.
 - B. Private firms outnumber publicly listed firms by approximately one hundred times.
 - C. Private firms outnumber publicly listed firms by approximately one thousand times.

Solution:

Choice C is correct. About 0.1% of US corporations are publicly traded, thus implying that private firms outnumber publicly listed firms in the United States by about one thousand times.

2. Which one of the following statements provides the most correct comparison between publicly listed and private equity securities?

- A. The total global market value of publicly listed equity securities is significantly greater than that of private equity securities.
- B. Individual investors have similar abilities to own publicly listed and private equity securities.
- C. Mature corporate equities are more likely to be private equity than publicly listed equity.

Solution:

Choice A is correct. Global public equity market values are approximately ten times greater than the market value of private equity.

Choice B is incorrect as private equity investments are far less accessible to individual investors.

Choice C is incorrect as mature firms are more likely to have publicly listed equity securities, although the buyout equity segment of the private equity market consists of mature firms.

3. Which one of the following statements is most correct about companies with private equity securities?

- A. Private companies consist almost entirely of early-stage companies.
- B. Private companies typically are characterized by a separation of ownership and management control.
- C. Private companies face limited disclosure requirements.

Solution:

Choice C is correct. Private companies are not required to provide the same level of public disclosure as publicly listed companies.

Choice A is incorrect as early-stage companies constitute firms that may attract private venture capital, which only comprises a fraction of overall private equity investment.

Choice B is incorrect as private equity owners typically exercise a high degree of management control.