

Level III of the CFA® Exam

Study Notes - Private Markets Pathway - Volume 1

Offered by AnalystPrep

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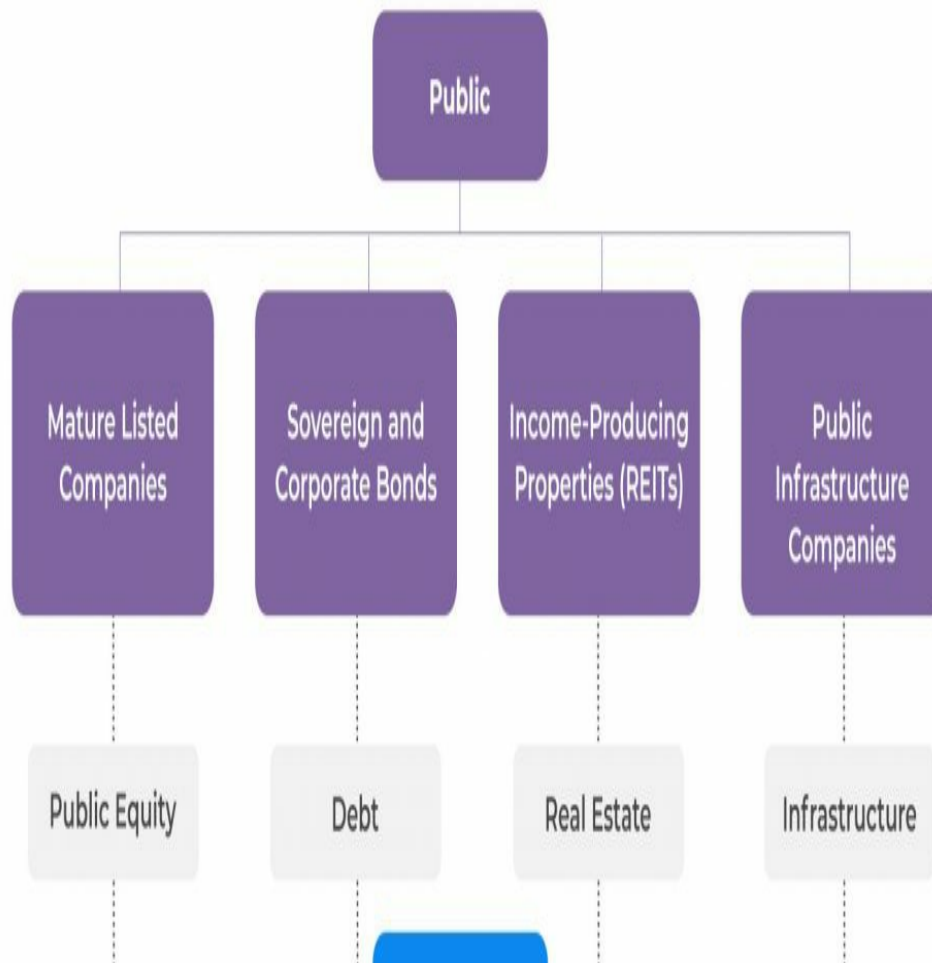
Reading 22: Private Investments and Structures

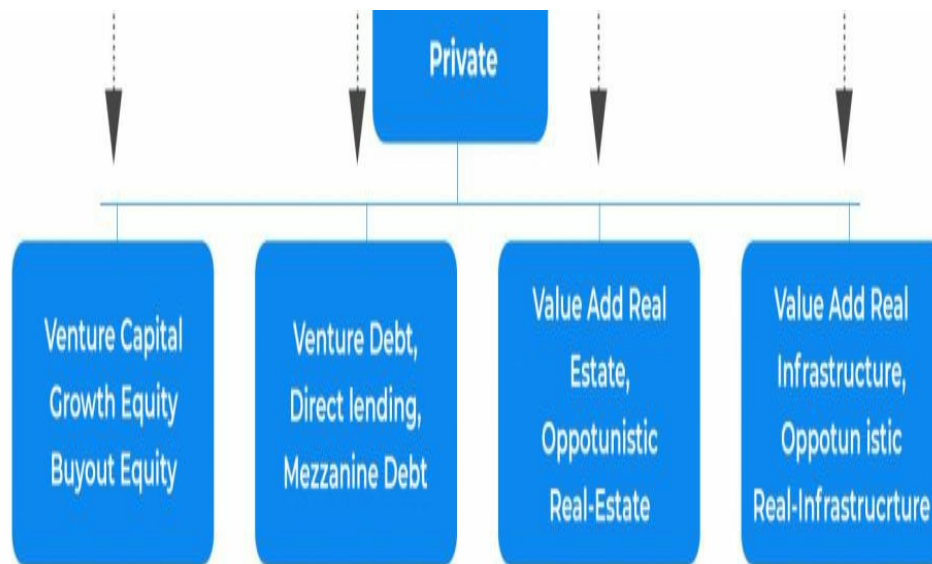
LOS 22a. Contrast the features of private and public investments, and discuss characteristics of private and public markets

Investing in the financial markets can broadly be categorized into two types: public and private investments. Each type offers distinct features, benefits, and challenges. Understanding these differences is crucial for investors aiming to diversify their portfolios and optimize returns.



Public Vs. Private Investments





Public Investments

Public investments involve listed securities such as debt or equity claims. These securities are traded on exchanges or over-the-counter markets. Public fund managers typically invest in non-controlling positions in mature issuers with stable cash flows. This is characterized by the ability to readily buy or sell positions and access current and historical price data and benchmarks.

Private Investments

Private investments consist of unlisted assets with no organized exchange or over-the-counter market. Private funds often acquire controlling or significant minority stakes held for longer periods for value creation through cash flow improvements. Private debt and equity claims are usually non-standardized and negotiated. The focus is on private investments relevant to institutional investors.

Distinguishing Between Alternative and Private Investments

Alternative investments include assets other than traditional public equity, fixed-income, and cash instruments. While most private markets are considered alternative investments, some alternatives involve strategies using public securities. Some alternative investments exist in both public and private forms, for example, REITs (public) and private real estate.

Private Markets Pathway includes the following asset types:

Private equity: This involves investing in companies that are not listed on a public exchange. It includes venture capital, where investors provide funding to startups and early-stage companies with strong growth potential, and buyouts, where investors buy a majority stake in established companies.

Private debt: Unlike publicly issued bonds, private debt involves lending money to companies outside of public markets. This can include direct lending, where investors provide loans to businesses without using a traditional bank, as well as mezzanine financing and distressed debt.

Private special situations: This refers to investments in opportunities created by unusual circumstances, such as company restructurings, bankruptcies, or other unique scenarios. These investments require specialized expertise to navigate and capitalize on the complexities involved.

Private real estate: This involves investing directly in real estate properties or through private real estate funds. The focus can be on a variety of property types, including residential, commercial, and industrial. Investments can range from development projects to income-producing properties.

Private infrastructure: This includes investments in physical structures and facilities essential for the economy and society, such as roads, bridges, airports, water and sewage systems, and energy generation and distribution networks. These investments often require significant capital and have long investment horizons.

Features of Public vs. Private Investments



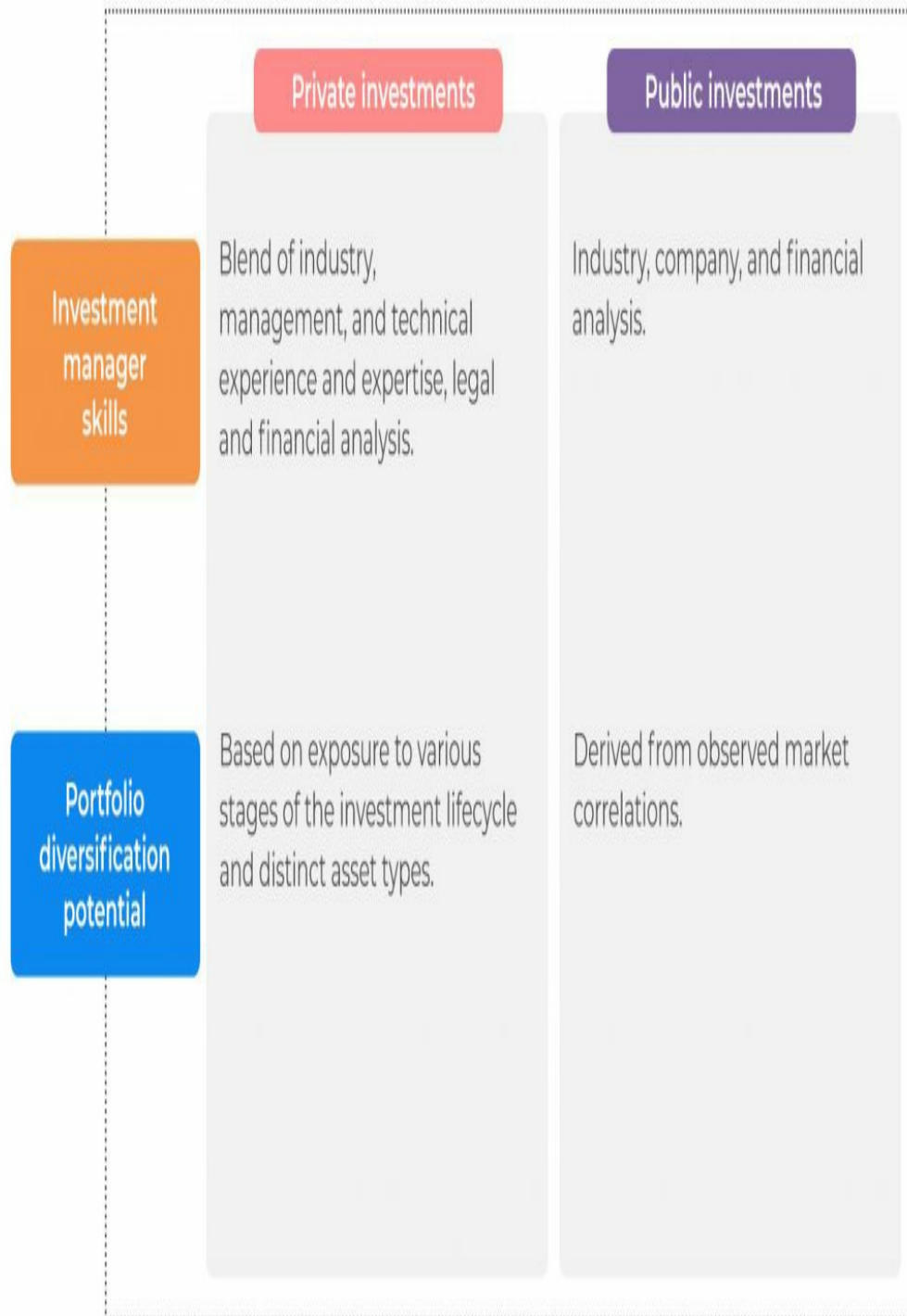


Features of Private and Public Investments

	Private investments	Public investments
Asset Prices	Negotiable, estimated.	Traded, observable.
Performance Measurement	Compound over the investment period.	Periodic based on observed market prices.
Liquidity	Illiquid, with sale prohibited or restricted.	Mostly liquid, with minimal trading restrictions.
Investment Process	Closed-ended, involves due diligence and strategic exit plans.	Open-ended, security selection.



Features of Private and Public Investments



Asset Prices and Performance Measurement is a crucial topic in understanding how investors utilize current and historical price data to make informed decisions in the public markets. This data aids in measuring returns, volatility, and correlations, which are essential for constructing portfolios that balance risk and return efficiently. Public market data serve as a fundamental input for various investment strategies, including judgment-based approaches that aim to capitalize on market views, rule-based strategies that employ factor analysis, and index-based investment strategies.

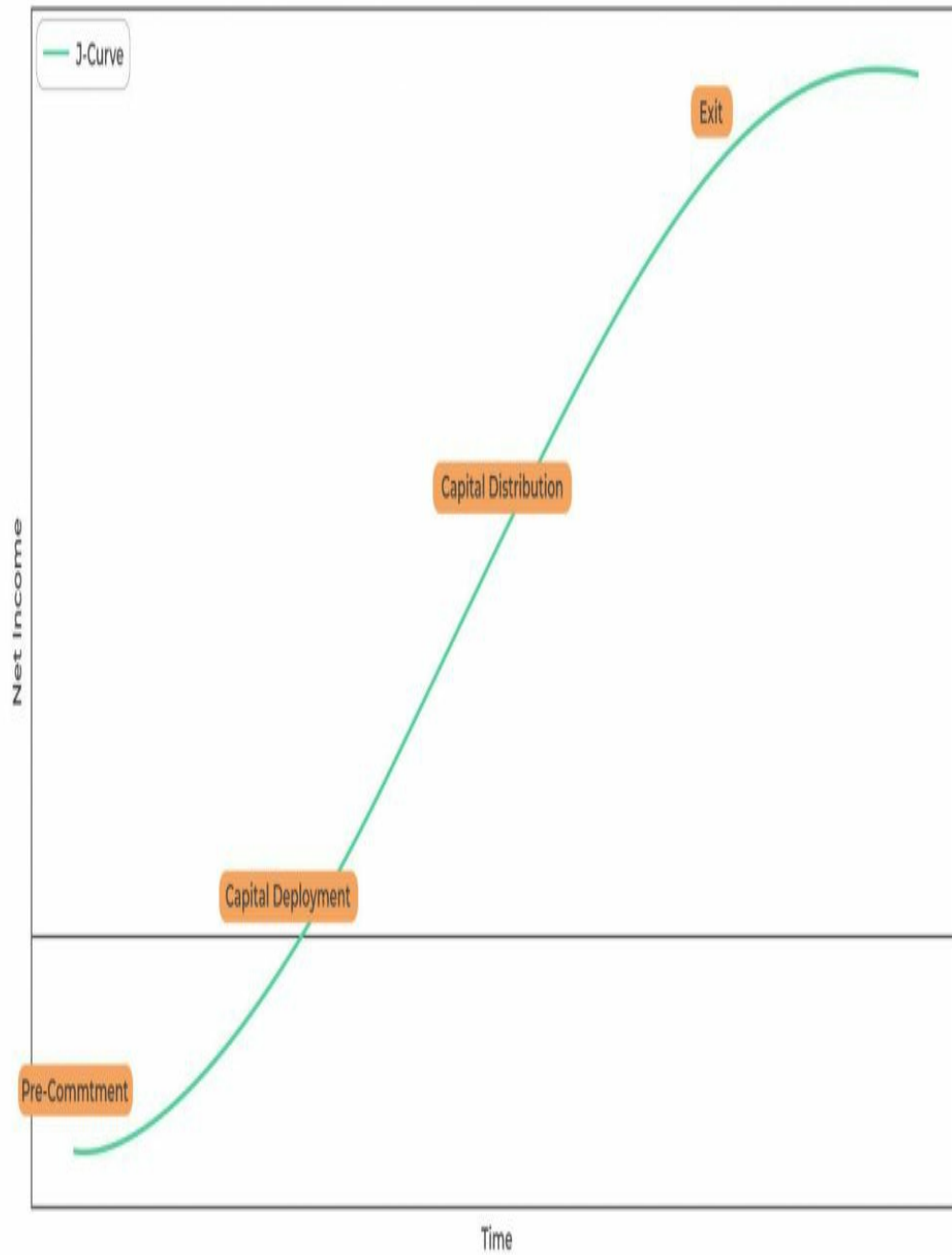
Unlike public markets, private market investors face challenges due to the lack of price transparency for their investments. This scarcity of information necessitates the use of alternative valuation methods such as relative valuation techniques, discounted cash flow analysis, and examination of recent transactions to estimate asset prices. Furthermore, the valuation estimates provided by fund managers to investors are often delayed and less frequent, typically on a quarterly basis, which hampers their utility for asset allocation decisions.

Liquidity and the Investment Process encompass the differences between trading and investing in public and private markets, each with its unique characteristics and implications for investors and fund managers. Public markets are known for their high liquidity and relatively low transaction costs, making the buying and selling of listed securities straightforward. This liquidity, coupled with price transparency, allows public fund managers to quickly adjust their portfolios in response to market developments, selling overvalued securities or buying undervalued ones. Public issuers typically are in a mature phase with stable cash flows, which contributes to the market's liquidity.

On the other hand, private investments, such as controlling or minority stakes in a firm, project, or real asset, are characterized by their inherent illiquidity. These investments demand larger capital commitments and a longer investment horizon, often extending to 10 years or more. Transactions in the private market are usually negotiated, limiting the number of potential buyers and sellers and often restricting investors' ability to sell their positions. This illiquidity necessitates a different investment process, typically a closed-end approach where investor compensation aligns with performance over longer periods.



Private Asset Investment Life Cycle (J-Curve)



The investment life cycle in private assets includes capital commitment, deployment, distribution, and exit phases. This cycle is marked by the **J-curve effect**, where initial negative returns gradually turn into cash flow and income growth. Unlike public market investors, who have limited influence over issuers, private investment managers play an active role in managing assets. Their involvement spans from target identification and due diligence to the creation of business and financing plans and, ultimately, managing the value creation process until the investment is exited and capital is returned to investors.

Manager Skills encompass the distinct competencies required by public and private fund managers due to the differing nature of their investment processes, roles, and responsibilities. Understanding these skills is crucial for success in managing portfolios in both public and private markets.

Public Fund Managers

Public fund managers focus on investment research across securities, companies, and industries. They utilize publicly available corporate financial statements and other data sources. Financial ratios and metrics are key tools for investment analysis in public markets.

Private Fund Managers

Private market investments include a wide range of opportunities, such as real estate developments, mature firms in distress, and startups. These investments often lack market price transparency, requiring a broader skill set for successful management. Key skills include local market knowledge and project development for real estate, operational experience and industry expertise in private equity, and significant relationships, management experience, and qualifications in legal, accounting, and tax matters. Private fund managers often need to conduct additional legal analysis due to less standardized contracts.

Venture Capital

Venture capital investments in early-stage companies carry high risk and a high rate of failure. Initial success is measured by non-financial milestones, such as product development and market strategy. Investors often contribute capital, experience, contacts, and partnerships to support startups.

Contribution to Startup Success

Equity capital and industry expertise provided by private fund managers are critical to a startup's success. For example, NEA's board membership and involvement in establishing partnerships and drug trials were key to expanding a business in its early stages.

Portfolio Diversification Potential

Understanding the diversification potential of private market investments is crucial for investors looking to optimize their portfolios. Private markets, due to their distinct features, offer unique opportunities for diversification away from public market securities.

Low Correlation with Public Markets

Private market investments typically show a low correlation with public market returns due to differences in market dynamics and investment characteristics. Illiquidity and longer investment periods in private markets make direct comparison with public markets challenging.

Sources of Diversification

Early-Stage Companies: Startups and early-stage companies, exemplified by CRISPR Therapeutics, offer high return potential but come with a high risk of failure. Their growth, often above-trend, is less influenced by the business cycle, providing a diversification benefit.

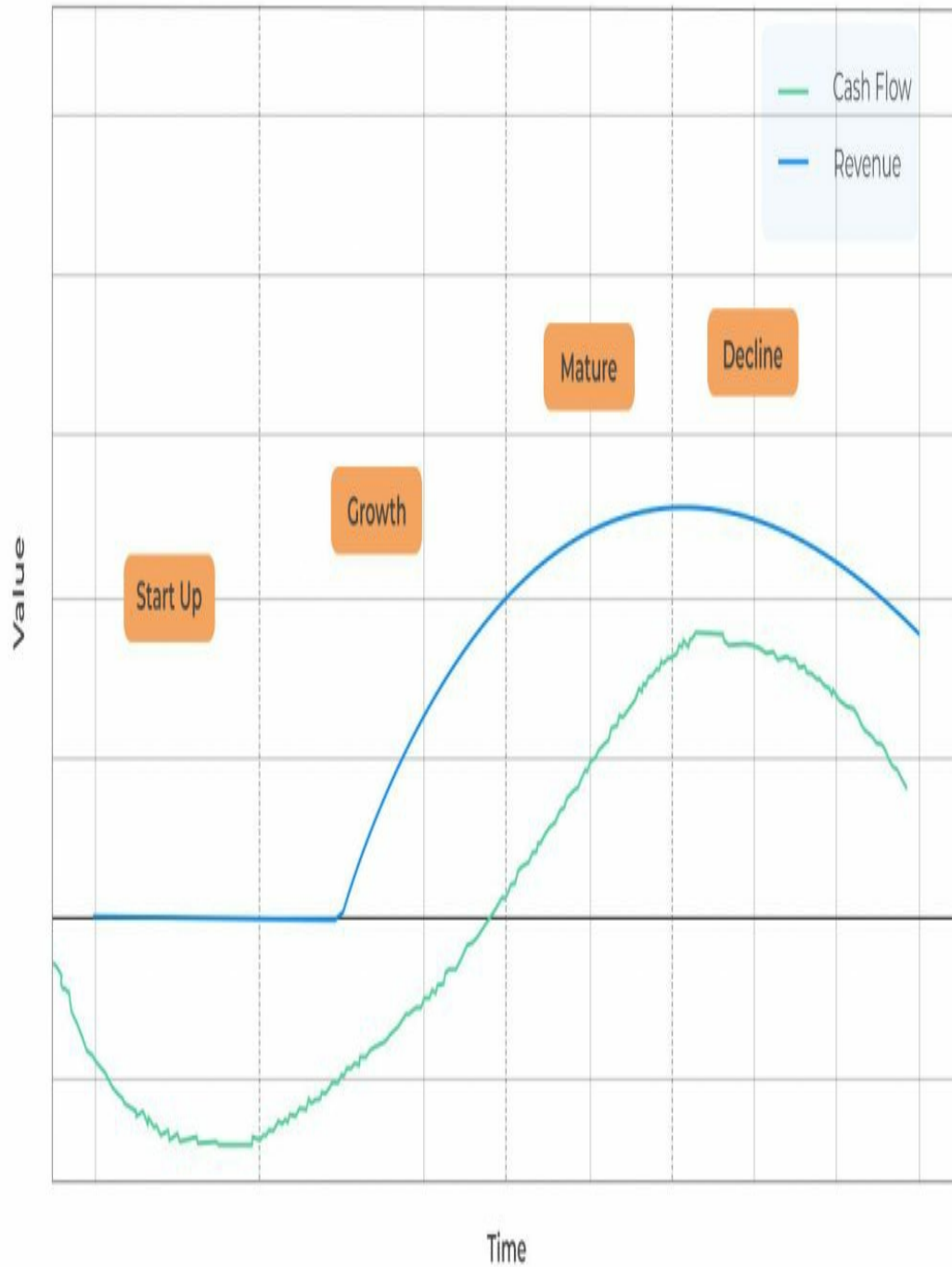
Buyout Equity Investments: This involves taking public companies private to reorganize and sell at a higher price. The performance of these companies can significantly diverge from public equities due to the active management by private fund managers.

Alternative Asset Classes: Investments in private real estate or infrastructure involve different

risk and return profiles compared to their public counterparts due to factors like major refurbishments or the development of large, single-use assets.



Company Life Cycle Stages



Barriers to Entry

The unique characteristics of private markets that offer diversification benefits also historically acted as barriers to entry for many investors, including lack of price transparency, illiquidity, and large minimum investment sizes. Specialized knowledge is often necessary to navigate and succeed in private market investments.

Increased Accessibility

Despite historical barriers, private market investments have become more accessible to a broader range of investors, including institutional investors and high-net-worth individuals. This change is attributed to evolving investment structures, ownership forms, and methods that accommodate a wider investor base.

Questions

Question 1

A fund manager is considering diversifying his portfolio by investing in different types of assets. He is looking at public investments, private investments, and alternative investments. He wants to invest in assets that are traded on exchanges or over-the-counter markets, and where he can readily buy or sell positions. Which type of investment should he consider?

- A. Private Investments
- B. Public Investments
- C. Alternative Investments

Answer: B is correct.

The fund manager should consider Public Investments. Public investments are those that are traded on exchanges or over-the-counter markets. These include stocks, bonds, and other securities that are listed on public exchanges like the New York Stock Exchange or NASDAQ. The key characteristic of public investments is their liquidity, meaning they can be readily bought or sold. This is because there is a large market of buyers and sellers, and the prices are transparent and readily available. This makes public investments suitable for investors who want the flexibility to adjust their positions quickly in response to changing market conditions. Furthermore, public investments are subject to regulatory oversight, which provides a level of protection for investors.

A is incorrect. Private investments are not traded on public exchanges or over-the-counter markets. Instead, they are sold directly to investors, often through private placements. These investments can include private equity, venture capital, and private debt. While they can offer high potential returns, they are typically less liquid than public investments, meaning they cannot be readily bought or sold. This makes

them less suitable for investors who want the flexibility to adjust their positions quickly.

C is incorrect. Alternative investments can include a wide range of asset types, including real estate, commodities, hedge funds, and private equity. While some alternative investments, such as commodities, can be traded on exchanges, many are not. Instead, they are often sold directly to investors and can be less liquid than public investments. Furthermore, alternative investments often require a higher level of expertise to understand and manage, making them less suitable for investors who want a straightforward, liquid investment.

Question 2

An institutional investor is planning to invest in a type of asset where she can acquire controlling or significant minority stakes, held for longer periods for value creation through cash flow improvements. These assets are usually non-standardized and negotiated. Which type of investment is she considering?

- A. Public Investments
- B. Alternative Investments
- C. Private Investments

Answer: C is correct.

The type of investment that the institutional investor is considering is Private Investments. Private investments are typically characterized by the acquisition of controlling or significant minority stakes in companies, with the intention of holding these investments for longer periods to create value through improvements in cash flows. These investments are usually non-standardized and negotiated, which means that they are not traded on a public exchange and the terms of the investment are often tailored to the specific needs of the investor and the company. Private investments can offer higher potential returns than public investments, but they also

come with higher risk and less liquidity. They are typically made by institutional investors, such as pension funds, endowments, and family offices, who have the resources and expertise to evaluate and manage these complex investments.

A is incorrect. Public Investments are investments in publicly traded securities, such as stocks and bonds. These investments are standardized, traded on public exchanges, and do not involve the acquisition of controlling or significant minority stakes in companies.

B is incorrect. Alternative Investments is a broad category that includes a wide range of asset classes, including private equity, hedge funds, real estate, commodities, and others. While some alternative investments may involve the acquisition of controlling or significant minority stakes in companies, not all do. Furthermore, not all alternative investments are non-standardized and negotiated. Therefore, this term does not specifically describe the type of investment that the institutional investor is considering.

LOS LOS 22b. Discuss private investment methods and structures and their uses

Investing in private markets presents a unique set of opportunities and challenges compared to public markets. Private investments often involve more complex structures, longer holding periods, and a higher degree of engagement from managers. Understanding the various methods and structures of private investment is crucial for investors looking to navigate this space effectively.

Private Investment Methods

Private investment methods in the field of private markets offer investors a variety of ways to engage with and benefit from their investments. These methods are primarily distinguished by the level of direct involvement and resources an investor is willing and able to commit. The three prevalent methods in private market investments include **Direct Investment**, **Co-Investment**, and **Fund Investment Alternatives**. Each of these methods has its unique characteristics, advantages, and considerations that cater to different investor profiles based on their commitment size and the ability and willingness to manage the investment actively.

1. Direct Investment

Direct Investment refers to the approach where investors directly purchase equity ownership or make private debt investments in companies, bypassing any intermediaries. This strategy often involves acquiring a significant, if not controlling, stake in a company, as seen in buyout equity transactions. Direct investors take on the responsibility of negotiating purchase prices and devising business strategies to increase value over the investment period. Large asset owners, such as sovereign wealth funds, commonly employ this method to potentially mitigate portfolio concentration risk in sizeable acquisitions. For example, Berkshire Hathaway's acquisition of Precision Castparts Corp. for \$37.2 billion in 2016 is a prime instance of direct investment, showcasing the scale and direct involvement required in such transactions.

2. Co-Investment

Co-Investment allows investors to partner with experienced lead investors, reducing the capital requirement and leveraging the lead investor's expertise. A real-world example is Google Ventures co-investing with Sequoia Capital in the Series A funding of HubSpot, a marketing, sales, and service software provider. This illustrates how co-investments can provide access to high-quality deals with reduced individual risk.

Direct Co-Investment is a collaborative strategy where investors, alongside one or more partners, acquire an ownership stake or private debt. Partners may include private fund managers. This approach helps investors to distribute their private market portfolio more evenly, capitalize on the expertise of their investment partners, and enjoy lower fees compared to indirect investments. An illustrative case is GIC's partnership with Oak Street in acquiring STORE Capital, demonstrating how sovereign wealth funds can engage in co-investments with private equity firms, especially in sectors like US real estate.

Limited Partner (LP) Co-Investment is a specialized form where investors, as limited partners, acquire stakes or private debt in investments managed by a private fund manager. LPs with strong relationships with General Partners (GPs) and the willingness to make significant investments might receive co-investment rights. This privilege enables them to participate in opportunities before they are widely available. Such arrangements are often favored for minority stakes in startups, where smaller investments are sought. Despite being open to smaller investors, these opportunities may have a minimal effect on larger portfolios due to startups' high failure rates. This underscores the value of deep industry knowledge and experience in evaluating investments. **Angel investors**, who are usually affluent individuals or seasoned entrepreneurs, frequently engage in early-stage financing for startups, showcasing the variety within direct investment strategies.

Benefits for General Partners

- GPs use co-investments to share investment risks and expand access to capital.

- Co-investments can attract new investors outside of existing partnerships, enhancing the fund's capital base and diversification.

Challenges and Considerations for Limited Partners

- Investments in private markets through limited partnerships are characterized by long, illiquid holding periods, contrasting with the liquidity and price transparency of public markets.
- LPs commit capital in advance without knowing the specific investments, facing uncertain timing for capital calls and return distributions.
- Performance-based incentive compensation is common, aiming to manage information asymmetry and align the interests of managers and investors.

3. Fund Investment Alternatives

Fund Investment Alternatives involve investing in private equity or venture capital funds managed by professional managers. This method offers diversification and requires less direct involvement. An example is an investment in the Carlyle Group's U.S. Equity Opportunity Fund, which diversifies investor capital across multiple companies within the fund's focus area.

Private Investment Structures

Private investment structures, such as closed-end funds organized as limited partnerships, play a crucial role in managing the relationship between general partners (GPs) and limited partners (LPs). These structures are designed to align interests and manage the investment life cycle effectively.

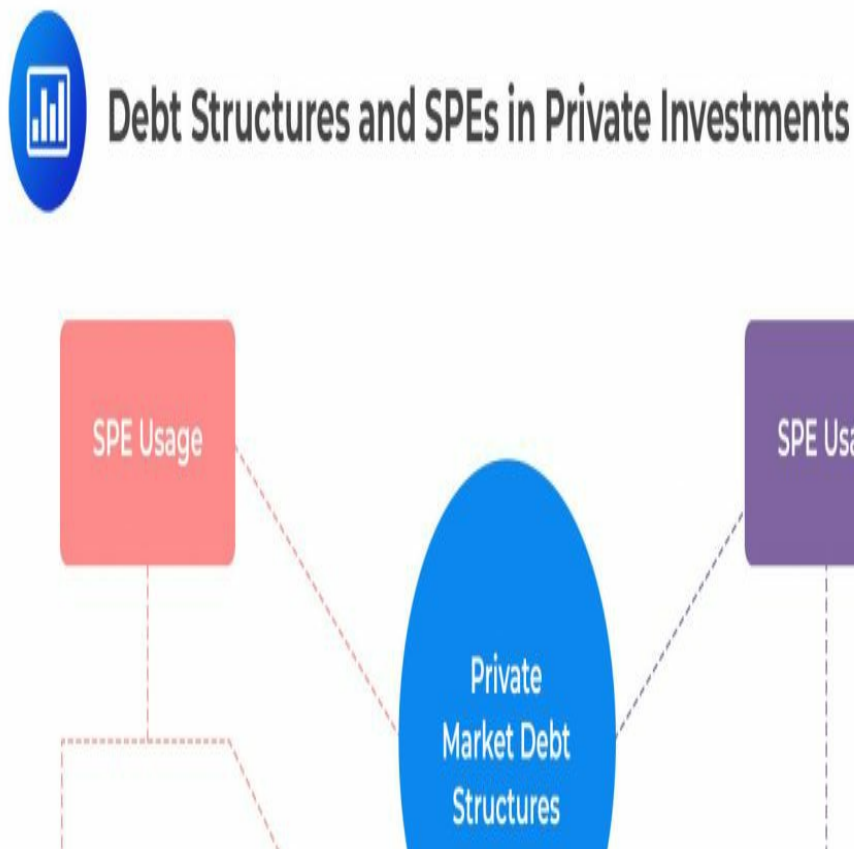
Corporate Governance and Legal Entities in private markets can vary widely, with minority investors often negotiating for special provisions like board seats or veto rights on strategic decisions. For instance, in the acquisition of Beats by Dre, minority investors negotiated for

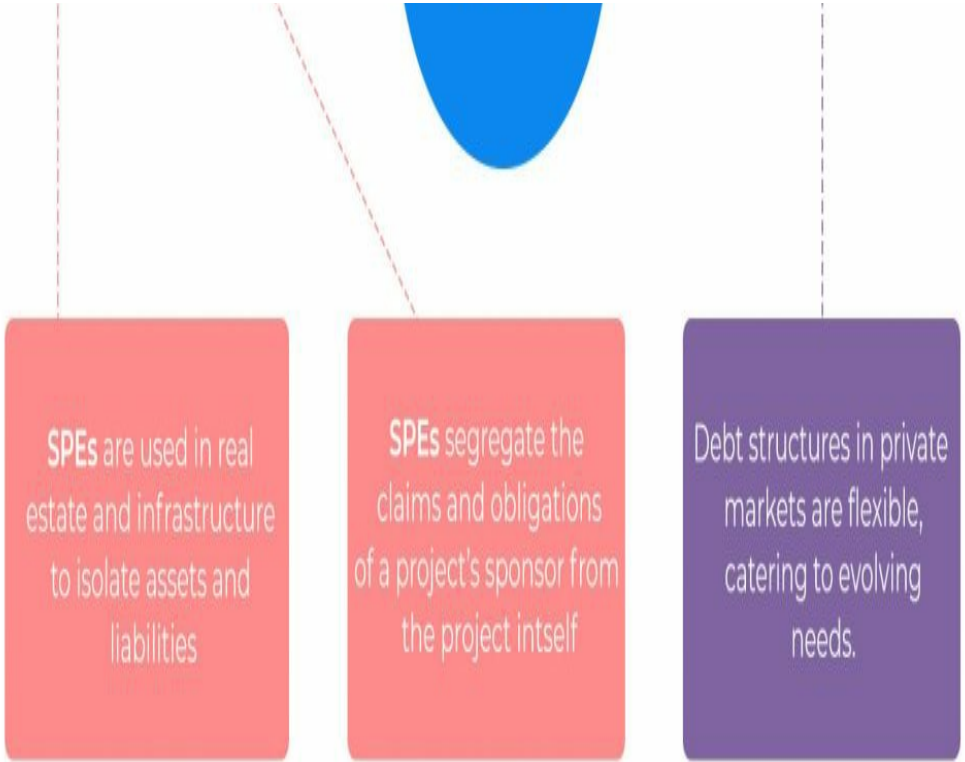
specific governance rights before the company was eventually sold to Apple.

Take-private transactions and Leveraged Buyouts (LBOs) typically involve creating a new legal entity to facilitate the acquisition, heavily financed through debt. Dell's \$24.4 billion buyout in 2013, led by its founder Michael Dell and Silver Lake Partners, is a notable example of an LBO, showcasing the complex financing and governance structures involved.

Debt Profile and Financing Structures in LBOs are designed to be flexible, accommodating evolving needs. Direct investment in private debt, such as the senior secured loans provided by Ares Capital Corporation to middle-market companies, illustrates the various ways investors can gain exposure to private debt.

Special Purpose Entities (SPEs) are often used in real estate and infrastructure to isolate investment projects from the balance sheets of investors. The Hudson Yards development in New York City, financed through a mix of equity and debt by a consortium of investors and developers, demonstrates the use of SPEs in large-scale real estate projects.





SPEs are used in real estate and infrastructure to isolate assets and liabilities

SPEs segregate the claims and obligations of a project's sponsor from the project itself

Debt structures in private markets are flexible, catering to evolving needs.

Questions

Question 1

In investments, public markets and private markets offer different opportunities and challenges. If an investor chooses to invest in public markets, they have the option to either select individual securities directly or delegate the selection to a public fund manager. On the other hand, private market investments involve more complex methods, longer holding periods, and a higher degree of manager engagement. Who are the two key parties in this structure whose interests need to be aligned for the successful functioning of private market investments?

- A. Public fund manager and individual investor
- B. General partners (GPs) and limited partners (LPs)
- C. Securities and fund manager

Answer: B is correct.

The two key parties in the structure of a closed-end fund, typically organized as a limited partnership in private markets, are the General Partners (GPs) and Limited Partners (LPs). The GPs are the managers of the fund who make the investment decisions and are responsible for the day-to-day operations of the fund. They have a fiduciary duty to act in the best interests of the LPs. The LPs are the investors who provide the capital for the fund. They have limited liability, meaning their losses are limited to the amount of their investment. The interests of the GPs and LPs need to be aligned for the successful functioning of private market investments. This is often achieved through the use of performance-based compensation for the GPs, which aligns their interests with those of the LPs by incentivizing them to maximize the return on the fund's investments.

A is incorrect. The public fund manager and individual investor are key parties in public market investments, not private market investments. While their interests also need to be aligned for successful investing, this is not the structure typically used in

private markets.

C is incorrect. Securities and fund manager are not the two key parties in the structure of a closed-end fund in private markets. Securities are the assets in which the fund invests, not a party to the fund structure. The fund manager could be considered a key party, but in the context of a closed-end fund in private markets, the correct term is General Partner.

Question 2

The investment landscape is diverse, with different strategies and structures available for investors. What is the primary characteristic of private market investments that differentiates it from public market investments?

- A. Private market investments are characterized by shorter holding periods
- B. Private market investments are characterized by a lower degree of manager engagement
- C. Private market investments are characterized by longer holding periods and a higher degree of manager engagement

Answer: C is correct.

Private market investments are characterized by longer holding periods and a higher degree of manager engagement. This is the primary characteristic that differentiates private market investments from public market investments. Private market investments, such as private equity, venture capital, and real estate, typically involve a longer-term commitment from investors. This is because these investments are often illiquid and cannot be easily sold or exchanged for cash. Additionally, managers of private market investments are typically more engaged in the operations of the companies they invest in. They often take an active role in strategic decision-making and may sit on the company's board of directors. This high degree of engagement is intended to align the interests of the managers with those of the investors and to maximize the potential for high returns.

A is incorrect. Private market investments are not characterized by shorter holding periods. In fact, the opposite is true. Private market investments typically require a longer-term commitment from investors due to their illiquid nature.

B is incorrect. Private market investments are not characterized by a lower degree of manager engagement. Again, the opposite is true. Managers of private market investments are typically more engaged in the operations of the companies they invest in, often taking an active role in strategic decision-making.

Glossary

- **Direct Investment:** Investing directly in a private company or project without intermediaries.
- **Co-Investment:** An investment made alongside an experienced lead investor in a specific project or company.
- **Fund Investment Alternatives:** Investing in a fund managed by professional managers that pools money from multiple investors to invest in private companies.
- **Closed-End Fund:** A fund with a fixed number of shares and a set investment period, typically organized as a limited partnership in private markets.
- **General Partners (GPs):** Individuals or entities responsible for managing a fund's investments.
- **Limited Partners (LPs):** Investors in a fund who have limited liability and do not participate in day-to-day management.
- **Leveraged Buyouts (LBOs):** The acquisition of a company using a significant amount of borrowed money to meet the cost of acquisition.
- **Special Purpose Entities (SPEs):** Legal entities created for a specific purpose, often used in real estate and infrastructure projects to isolate financial risk.

LOS LOS 22c. The Difference between Public and Private Market Performance

Public Markets

Public markets include listed equity and debt securities from mature issuers with stable cash flows. For instance, companies like Apple and Microsoft are part of the public market.

Large public equity issuers usually pay periodic dividends to shareholders, while public debt securities are typically non-callable bonds that pay periodic fixed coupons to debtholders. For example, Coca-Cola is known for its regular dividend payments.

Public security analysts rely on measures of income and asset appreciation calculated on a consistent periodic basis to compare returns and performance. This is similar to how analysts would compare the performance of Amazon and Google based on their quarterly earnings reports.

Private Markets

Private market investments include private equity and debt from various stages over the company life cycle, as well as private real estate and infrastructure. Examples include investments in startups or private real estate projects.

These investments face valuation challenges due to their illiquidity, lack of price transparency, and dissimilarity among investments in the same private asset class. For instance, valuing a startup can be challenging due to the lack of a public market price.

These factors prevent analysts from applying the same periodic and relative performance measures as for public markets.

Private market investments also involve extended upfront capital commitments, which do not exist in public markets. For example, an investor might commit funds to a startup years before the company begins generating revenue.

Investors must typically commit funds to a limited partnership months or years in advance of capital deployment, with little certainty regarding the timing or magnitude of capital calls. This is similar to how venture capitalists commit funds to startups.

Investors often hold these commitments in more liquid public investments with possibly lower expected returns. For example, an investor might hold funds in a low-risk bond while waiting for a capital call from a private investment.

Performance Measures

Return on Investment (ROI) is a common performance measure in private markets. It is the ratio or multiple of cash flows received versus those invested. For example, if an investor puts \$100,000 into a startup and later sells their stake for \$200,000, their ROI would be 2.0.

ROI ignores the time value of money and the investment holding period. This means that it doesn't account for the fact that money today is worth more than the same amount in the future due to its potential earning capacity.

In the special case where a single investment occurs at the beginning of an investment holding period and a one-time payoff occurs at the end, the ROI over an investment time horizon can be converted to an equivalent **Internal Rate of Return (IRR)** of an n-year investment holding period. The IRR is the discount rate that makes the net present value of all cash flows (both positive and negative) from a particular project equal to zero.

$$\text{ROI} = \frac{\sum(\text{Cash flows received})}{\sum(\text{Cash flows invested})}$$

Where:

- ROI = Return on Investment
- Cash flows received = Total cash inflows from the investment
- Cash flows invested = Total cash outflows for the investment

$$\text{ROI} = (1 + \text{IRR})^n$$

where n = Number of years of the investment holding period

The Internal Rate of Return (IRR) is a financial metric used to evaluate the profitability of potential investments. It is the discount rate that makes the net present value (NPV) of all cash flows (both positive and negative) from a particular project or investment equal to zero. In simpler terms, IRR is the annualized effective compounded return rate that can be earned on the invested capital, i.e., the yield on the investment. Consider the figure below, the portion of the curve that is below the horizontal zero line represents times when the investment is losing money or when money is being spent (negative cash flows). The portion of the curve above the horizontal zero line represents times when the investment is making money (positive cash flows). The dashed line across the graph at the "zero" level on the Returns axis represents the break-even point for the investment. When the curve is below this line, you're in a loss position; when it's above, you're in a profit position. To understand IRR, it's important to first grasp the concept of Net Present Value (NPV), which is the sum of the present values of the cash flows at a given discount rate. The formula for NPV is:

$$NPV = \sum \left(\frac{CF_t}{(1 + r)^t} \right) - \text{Initial Investment}$$

Where:

- NPV = Net Present Value
- CF_t = Cash flow at time t
- r = Discount rate
- t = Time period

The IRR is the rate r that sets the NPV to zero:

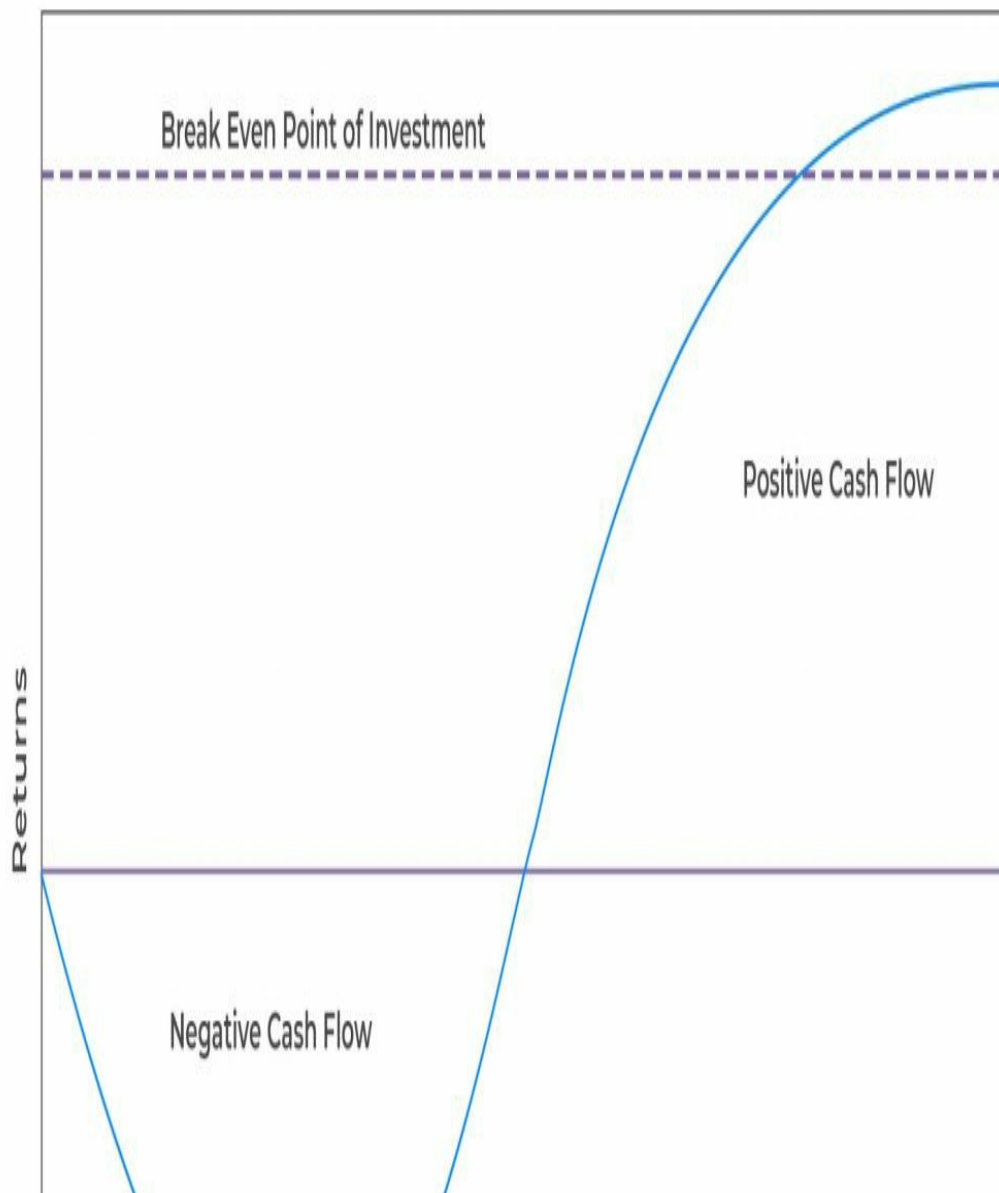
$$0 = \sum \left(\frac{CF_t}{(1 + IRR)^t} \right) - \text{Initial Investment}$$

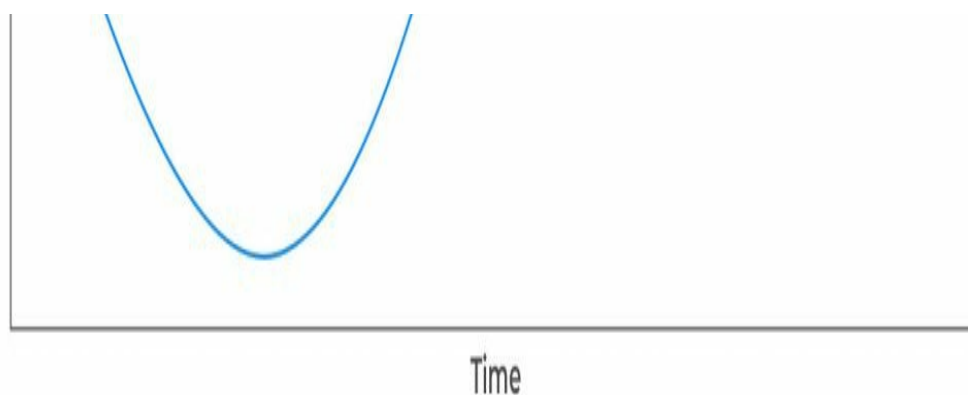
The concept of IRR is key because it accounts for the timing of each cash flow. The earlier you

receive cash (or the later you have to pay it out), the more valuable it is due to the time value of money. This is why the IRR is a preferred metric for comparing the efficiency of different investments. It can be thought of as the annual growth rate that an investment achieves over its lifecycle.



IRR over the Private Asset Investment Life Cycle





Challenges in Comparing Public and Private Market Performance

- Delayed cash outflows in the form of committed capital invested in more liquid investments with lower expected returns will reduce IRR.
- Greater uncertainty surrounding the timing of capital calls makes the comparison of expected returns more challenging.
- Key factors affecting the timing of capital calls include the economic outlook and public market conditions.
- The vintage year, or year in which capital is initially deployed to a specific investment or project or, more generally, by a private market fund, is an important private investment characteristic that is closely tracked for comparing similar investments made at the same time and for seeking diversification over time across investment life cycles within a private market allocation.

Example: OptiGrow Ventures' ROI and IRR

After a three-year expansion phase, assume that PeakInvest Capital can sell its initial USD250 million (equal to 25% of the original USD1 billion investment) equity stake in OptiGrow Ventures for USD800 million.

If we assume that PeakInvest makes a single initial investment and receives no dividends or distributions over the three years prior to the sale, calculate the ROI on the OptiGrow equity