2020 年 06 月 CFA 一级百题预测

1. **ETHICS AND PROFESSIONAL STANDARDS**
2. **QUANTITATIVE METHODS**
3. **ECONOMICS**
4. **FINANCIAL REPORTING AND ANALYSIS**
5. **CORPORATE FINANCE**
6. **EQUITY**
7. **FIXED INCOME**
8. **DERIVATIVES**
9. **ALTERNATIVE INVESTMENTS**
10. **PORTFOLIO MANAGEMENT**

9. Alternative Investments

9.1. Traditional Investment vs. Alternative Investment

9.1.1. 重要知识点

9.1.1.1. 理解其他类投资与传统投资的不同之处，并掌握其他类投资的特性

- Illiquidity of underlying investments;
- Narrow manage specialization;
- Low correlation with traditional investments;
- Low level of regulation and less transparency;
- Limited and potentially problematic historical risk and return data;
- Unique legal and tax considerations.

9.1.1.2. 掌握其他类投资在整个投资组合中的特点

- High return;
- High risk.
- Low correlation(improve both portfolio risk and expected return);

9.1.2. 基础题

Q-1. Generally, the purpose of an investor who adds alternative investments to their traditional investment portfolio is most likely:

A. Persuing higher return through taking more risk.

B. Persuing higher return while lowering the risk.

C. Minimizing the portfolio risk by giving up some return.

Q-2. Compared to traditional investments, alternative investments least likely demonstrate which of the following characteristics?

A. Narrow manager specialization

B. Underlying investments that are illiquid

C. A high degree of regulation

Q-3. Alternative investments that rely on estimates rather than observable market prices for valuation purposes are most likely to report:

A. returns that are understated.

B. volatility of returns that is understated.

C. correlations of returns with the returns of traditional assets that are overstated.

Q-4. Relative to traditional investments, alternative investments are best characterized as having:

A. higher correlations with other asset classes.

B. unique legal and tax considerations.

C. greater liquidity.

Q-5. Compared with long-only investments in stocks and bonds, alternative investments are most likely characterized by less:

A. flexibility to use derivatives.

B. manager specialization.

C. transparency.

Q-6. Which of the following most likely belongs in an alternative asset category?

A. Securitized commercial real estate debt.

B. Equity in an emerging market company that is traded over-the-counter.

C. A limited partnership that takes long and short positions in publicly traded equity.

Q-7. A measure that is most likely well-suited to analyzing the performance of alternative investments that may exhibit negative skewness in returns is the:

A. safety-first measure.

B. Sortino ratio.

C. Sharpe ratio.

Q-8. Which of the following statements concerning the historical record of alternative investments is most likely correct?

A. The inclusion of previous return data for funds that enter the index leads to a downward bias in index performance.

B. The exclusion of returns of funds that have been liquidated leads to an upward bias in index performance.

C. The use of appraised values instead of market prices leads to an upward bias in volatility.

Q-9. Adding alternative investments to a portfolio of traditional investments will most likely result in a new combined portfolio with returns and standard deviation that are, respectively:

	Returns	Standard Deviation
A.	lower	lower
B.	higher	lower

C. higher higher

9.2. Risk Management of Alternative Investments

9.2.1. 重要知识点

9.2.1.1. 掌握其他类投资的风险管理与尽职调查

- **Risks management**
  - Traditional risk and return measures (such as mean return, standard deviation of returns, and beta) may not provide an adequate picture of characteristics of alternative investments.
  - Because of the active use of derivatives by many alternatives managers, operational risk, financial risk, counterparty risk, and liquidity risk are key considerations for prospective investors.
  - Asymmetric risk and return profiles, limited portfolio transparency, and illiquidity.
  - Past performance is not necessarily representative of future performance.
  - The reported correlations of those investments with other investments may vary from the actual correlations.
- **A typical due diligence process**
  - Organization;
  - Portfolio management;
  - Operations and controls;
  - Risk management;
  - Legal review;
  - Fund terms.

9.2.2. 基础题

Q-10. An analyst who intends to assess the downside risk of an alternative investment is *least likely* to use the investment's:

A. Sortino ratio.

B. Value at risk (VaR).

C. Standard deviation of returns.

9.3. Hedge Fund

9.3.1. 重要知识点

9.3.1.1. 了解对冲基金的收益目标（绝对和相对），投资策略，并能理解四种策略中的子策略，潜在收益与风险、估值方式、尽职调查的要点

- **Return objective**
  - Absolute return: e.g. total return of 12%.
  - Relative return: e.g. the return is 6% higher than DJIA.
- **Restrictions on redemptions**
  - Lockup period: the minimum period before investors are allowed to make withdrawals or redeem shares from a fund;
  - Notice period: the length of time (typically 30 to 90 days) in advance that investors may be required to notify a fund of their intent to redeem;
- **Fund of fund:** funds that hold a portfolio of hedge fund.
  - FoF benefits and drawbacks
    - FOFs enable small investors to have returns in hedge funds;
    - FOFs have some expertise in conducting due diligence on hedge funds;
    - Negotiate better redemption terms for investors;
    - FOFs invest in numerous hedge funds, diversifying across fund strategies, investment regions, and management styles;
    - FOFs managers charge an additional layer of fees beyond the fees charged by the individual hedge funds in the portfolio.
- **Strategies**
  - **Event-driven strategies**
    - **Merger arbitrage:** going long (buying) the stock of the company being acquired and going short (selling) the stock of the acquiring company;
    - **Distressed/restructuring:** focus on the securities of companies either in bankruptcy or perceived to be near to bankruptcy;
    - **Activist shareholder:** purchase of sufficient equity in order to influence a company’s policies or direction;
    - **Special situations:** focus on companies that are currently engaged in restructuring activities other than merger/acquisitions and bankruptcy.

- **Relative value strategies**
  - **Fixed income convertible arbitrage:** market neutral (zero beta) strategies that seek to exploit a perceived mispricing between a convertible bond and its component parts;
  - **Fixed income asset backed:** take advantage of mispricing across different asset backed securities;
  - **Fixed income general:** focus on the relative value within the fixed income markets;
  - **Volatility:** use options to go long or short market volatility;
  - **Multi-strategy:** looks for investment opportunities wherever they might exist.
- **Macro strategies**
- **Equity hedge strategies**
  - **Market neutral:** Maintain a net position that is neutral with respect to market risk. The intent is to profit from individual securities movements while hedging against market risk;
  - **Fundamental growth:** fundamental analysis to identify companies expected to exhibit high growth and capital appreciation;
  - **Fundamental value:** buy equity securities believed to be undervalued based on fundamental analysis;
  - **Quantitative directional:** technical analysis to identify companies that are under- and overvalued;
  - **Short bias:** varies its net short exposure based upon market expectations, going fully short in declining markets.

➢ **Potential benefits and risks**

- Hedge fund strategies that generate the highest returns in some years can be the ones to perform the most poorly in subsequent years;
- In periods of financial crisis, the correlation of returns between global equities and hedge funds tends to increase, which limits hedge funds' effectiveness as a diversifying asset class.

➢ **Valuation**

- The valuation of hedge fund may use market or estimated values of underlying positions.

➢ Key due diligence points to consider include **investment strategy**, **investment process**, **competitive advantage**, **track record**, **size and longevity**, **management style**, **key-person risk**, **reputation**, **investor relations**, **plans for growth**, and **systems risk management**.

9.3.2. 基础题

Q-11. In valuing underlying hedge fund positions, the most conservative approach is most likely one that uses:

A. the average of the bid and ask prices.

B. bid prices for longs and ask prices for shorts.

C. the most recent market prices.

Q-12. Mikey Chow is a financial analyst in Moonlight Hedge Fund. The fund is planning to make a substantial investment overseas. Through a diligent research on economics condition of serval countries, Mikey found both India and China were good targets. He then identified some industries in both countries with promising futures. When Mikey made these investment decisions, he is *most likely* employing a：

A. event-driven strategy.

B. macro strategy.

C. quantitative directional method.

Q-13. Hedge funds are least likely to have restrictions concerning:

A. the withdrawal of invested funds.

B. the use of derivatives.

C. the number of investors in the fund.

Q-14. Which of the following least likely describes an advantage of investing in hedge funds through a fund of funds? A fund of funds may provide investors with:

A. access to due diligence expertise.

B. lower fees because of economies of scale.

C. access to managers who can negotiate better redemption terms.

Q-15. Investors look at many key due diligence factors when investing in hedge funds. Which of the following factors is most likely the biggest challenge to fully assess?

A. Investment strategy and process

B. Size and longevity

C. Track record

9.4. Fee Structure of Hedge Funds

9.4.1. 重要知识点

9.4.1.1. 掌握 hedge funds 的管理费用结构

- **Management fee**
  - Based on capital under management
    - Attractive to portfolio managers because the management fee alone will generate significant revenue if assets under management are large.
  - Earned irrespective of returns
- **Incentive fee**
  - Based on profits net of (or before) management fee;
  - Only earned if the return exceeds a hurdle rate;
  - High water mark: highest value reported
    - The hedge fund must recover past losses and return to previous high water mark before any additional incentive fee is earned;
    - Protect clients from paying twice for the same performance.
  - "2 and 20" means 2% management fee and 20% incentive fee for hedge funds;
  - FoFs may charge extra 1% management fee and 10% incentive fee.

9.4.2. 基础题

Q-16. High-water marks are typically used when calculating the incentive fee on hedge funds. They are most likely used by clients to:

A. avoid prime brokerage fees.

B. avoid paying twice for the same performance.

C. claw back the management fees.

Q-17. AWJ Capital is a hedge fund with $100 million of initial investment capital. They charge a 2 percent management fee based on assets under management at year-end and a 20 percent incentive fee. In its first year, AWJ Capital has a 30 percent return. Assume management fees are calculated using end-of-period valuation. If the incentive and management fees are calculated independently, what is an investor's effective return given this fee structure?

A. 17.89%.

B. 19.85%.

C. 21.40%.

Q-18. Do management fees most likely get paid to the manager of a hedge fund, regardless of the fund's performance?

A. No, only when the fund's net asset value exceeds the previous high-water mark

B. No, only when the fund's gross return is positive

C. Yes

Q-19. A hedge fund with $225 million of initial capital charges a management fee of 1% and an incentive fee of 10%. The management fee is based on assets under management at year-end, and the incentive fee is calculated independently from the management fee. Assuming the fund earns a 15% return at year-end, total fees earned by the hedge fund during the year are closest to:

A. $5.96 million.

B. $5.70 million.

C. $5.63 million.

Q-20. A hedge fund begins the year with $240 million and earns a 20% return for the year. The fund charges a 2% management fee on end-of-year fund value and a 20% incentive fee on the return, net of the management fees, that is in excess of a 7% fixed hurdle rate. The fund's investors' return for the year, net of fees, is closest to:

A. 19.56%.

B. 15.48%.

C. 22.45%.

9.5. Private Equity

9.5.1. 重要知识点

9.5.1.1. 掌握 PE 的分类和退出策略，了解 PE 的费用结构、潜在收益与风险等。

- **Strategies**
  - **Leveraged buyouts (LBOs):** acquire companies with a significant percentage of the purchase price financed through debt. LBO 的两种形式:MBO 和 MBI
    - Management buyout(MBO): the current management team is involved in

the acquisition;

- Management buy-ins(MBI): an current management team is being replaced and the acquiring team will be involved in managing the company.

- **Venture capital (VC):** invest in private companies with high growth potential.
    - Formative stage:
        - Angel investing: at the idea stage, funds are used to transform the idea into a business plan and to assess market potential.
        - seed stage: support product development and/or marketing efforts. The first stage at which VC funds invest.
        - early stage: help companies move toward operation but before commercial production and sales have occurred.
    - Later stage: after commercial production and sales have begun, but before any IPO. Funds may be used for expansion.
    - Mezzanine-stage financing: pre IPO
- **Development capital:** minority equity investments in more mature companies that are looking for capital to expand or restructure operations, enter new markets, or finance major acquisitions;
- **Distressed investing:** investing in securities of companies in financial difficulties.

- **Structure and fees**
    - **Committed capital:** the amount that the limited partners have agreed to provide to the private equity fund;
    - **Management fee:** typically 1%~3% of **committed capital;**
    - **Incentive fee:** funds distributed by the general partner to the limited partner(s) based on realized profits.
- **Exit strategies**
    - **Trade Sale:** sale of company to a strategic buyer such as a competitors;
    - **IPO:** the portfolio company selling its shares to public investors through an IPO;
    - **Recapitalization:** the private equity firm re-leverages or introduces leverage to the company and pays itself a dividend;
    - **Secondary Sale:** a sale to another private equity firm or a group of investors;
    - **Write-off/Liquidation**: when a transaction has no gone well, the private equity firm is updating its value of the investment or liquidating the portfolio company to move on to other projects.

9.5.2. 基础题

Q-21. Management fees for a private equity fund are most likely based on the:

A. fair value of assets under management.

B. drawdown of committed capital plus any undistributed capital gains.

C. total committed capital minus capital returned from investments that are exited.

Q-22. Hedge funds are similar to private equity funds in that both:

A. are typically structured as partnerships.

B. assess management fees based on assets under management.

C. do not earn an incentive fee until the initial investment is repaid.

Q-23. Angel investing capital is typically provided in which stage of financing?

A. Later-stage.

B. Formative-stage.

C. Mezzanine-stage.

Q-24. An alternative investments fund that employs leverage and takes long and short positions in securities is most likely a:

A. hedge fund.

B. venture capital fund.

C. leveraged buyout fund.

Q-25. Which of the following characteristics of a target company is likely the least attractive for a leveraged buyout?

A. Substantial amount of physical assets

B. Strong and sustainable cash flow

C. High leverage

Q-26. A venture capital typically provides fund for firms to prepare initial public offering. In which stage this venture capital is most like provide financing?

A. Formative stage.

B. Mezzanine-stage.

C. Later stage.

Q-27. Illiquidity is most likely a major concern when investing in:

A. private equity.

B. real estate investment trusts.

C. commodities.

Q-28. With regard to venture capital, which of the following statements is most likely true regarding venture capital?

A. Investments typically are in later stage and more established companies.

B. Investors tend to have short time horizons.

C. Investors require a higher return than investors in publicly traded equity.

Q-29. Firms with which of the following characteristics are most likely candidates for a management buyout (MBO)?

A. Firms with large amounts of undervalued assets

B. Firms with low levels of cash flow

C. Firms with high dividend payout ratios

Q-30. In the context of venture capital financing, seed-stage financing most likely supports:

A. initial commercial production and sales.

B. product development and/or marketing efforts.

C. transformation of an idea into a business plan.

Q-31. Which of the following is most likely a private equity strategy?

A. Merger arbitrage

B. Quantitative directional

C. Venture capital

9.6. Real Estate

9.6.1. 重要知识点

9.6.1.1. 掌握房地产投资的形式、潜在收益与风险、估值方法与尽职调查的要点

- **Forms**

	Equity	Debt
Private	•Direct investments in real estate. This can be through sole ownership, joint ventures, real estate limited partnerships, or other forms of commingled funds	•Mortgages •Construction lending
Publicly traded	•Shares of real estate operating companies •Shares of REITs	•MBS (Residential and commercial) •Collateralized mortgage obligations

- **Performance measure**
  - Appraisal index
    - Use estimates of value (appraisals) as inputs to the indices;
    - Rely on comparable sales and cash flow analysis techniques;
    - **Understate volatility**.
  - Repeat sales index
    - Use changes in prices of properties to construct the indices;
    - **Sample selection bias**.
  - REIT indices
    - Use the prices of publicly traded shares of REITs to construct the indices;
    - More frequently traded, more reliable is the index.
- Real estate returns are highly correlated with global equity returns but less correlated with global bond returns.
- **Real estate valuation**
  - Comparable sales approach
  - Income approach
    - Property value=NOI/cap rate
      - NOI=net operating income
      - Cap rate (capitalization rate) = discount rate-growth rate
  - Cost approach
- **REITs valuation**
  - Income based approach
    - REIT Value=FFO/cap rate
    - REIT Value=AFFO/cap rate
  - Asset based approach

- ◆ REIT NAV=market value of a REIT’s total assets - market value of a REIT’s total liabilities.

9.6.2. 基础题

Q-32. A real estate investor looking for equity exposure in the public market is most likely to invest in:

A. real estate limited partnerships.

B. shares of real estate investment trusts.

C. collateralized mortgage obligations.

Q-33. The real estate index most likely to suffer from sample selection bias is a(n):

A. REIT index.

B. appraisal index.

C. repeat sales index.

Q-34. Compared with other investment asset classes, an investment in real estate is least likely to be characterized by:

A. basic indivisibility.

B. homogeneity.

C. fixed location.

Q-35. Which of the following is most likely a private real estate investment vehicle?

A. Real estate limited partnership

B. Collateralized mortgage obligation

C. Real estate investment trust

Q-36. The direct capitalization approach to real estate valuation most likely applies a capitalization rate to the annual:

A. net operating income.

B. net operating income minus income taxes.

C. net operating income minus depreciation.

9.7. Commodities

9.7.1. 重要知识点

9.7.1.1. 掌握大宗商品的投资形式、潜在收益与风险及与定价相关的概念

- **Forms**
  - Futures, forwards, options and swaps;
  - Commodity ETF;
  - Equities that are directly linked to a commodity;
  - Managed futures funds;
  - Individual managed accounts;
  - Specialized funds in specific commodity sectors.
- **Potential benefits and risks**
  - Potential for returns;
  - Portfolio diversification;
  - Inflation protection.
- **Pricing**
  - **Futures price ≈ spot price × (1 + r) + storage cost – convenience yield;**
  - **Convenience yield:** the value of the convenience of having physical possession of the commodity and having it immediately available for use;
  - **Contango:** futures price > spot price;
  - **Backwardation:** futures price < spot price.
- **Sources of commodities futures returns**
  - **Roll yield:** the difference between the spot price of a commodity and the price specified by its futures contracts;
  - **Collateral yield:** the interest earned on the collateral posted as a good-faith deposit for the futures contracts;
  - **Spot prices:** the primary determinant of spot (or current) prices is the relationship between current supply and demand, as discussed earlier.

9.7.2. 基础题

Q-37. If an investor uses derivatives to make a long investment in commodities, the return earned on margin is best described as:

A. convenience yield.

B. collateral yield.

C. price return.

Q-38. The most likely impact of adding commodities to a portfolio of equities and bonds is to:

A. increase risk.

B. reduce exposure to inflation.

C. provide higher current income.

Q-39. When the futures price of a commodity exceeds the spot price, the commodity market is most likely in:

A. contango.

B. backwardation.

C. carry.

Q-40. If the level of broad inflation indexes is largely determined by commodity prices, the average real yield on direct commodity investments is most likely:

A. less than zero.

B. equal to zero.

C. greater than zero.

Q-41. The three main sources of return for commodities futures contracts most likely are:

A. collateral yield, roll yield, and spot price return.

B. convenience yield, dividend yield, and spot price return.

C. collateral yield, convenience yield, and roll yield.

Q-42. The return on a commodity index is likely to be different from returns on the underlying commodities because:

A. assets are not marked to market.

B. data are subject to survivorship bias.

C. indices are constructed using futures contracts.

Q-43. Which of the following wheat prices is most likely indicating the wheat price are referred to as being in contango?

A. $70 of spot price, $75 of September, and $80 of December.

B. $80 of spot price, $75 of September, and $70 of December.

C. $75 of spot price, $75 of September, and $75 of December.

9.8. Infrastructure

9.8.1. 重要知识点

9.8.1.1. Infrastructure

- **Definition:** real, capital intensive, long-lived assets, which are intended for public use and provide essential services;
- **Characteristics of infrastructure**
  - High barriers to entry;
  - Stable cash flows;
  - Protection against inflation;
  - Better match the longer-term liability structure of some investors.
- **Categories of Infrastructure Investments**
  - Economic VS social infrastructure assets;
  - Brownfield VS greenfield infrastructure investments
    - Investing in existing investable infrastructure assets may be referred to as **brownfield investments;**
    - Investing in infrastructure assets that are to be constructed may be referred to as **greenfield investments.**
- **Forms of infrastructure investments**
  - Invest directly in the underlying assets;
  - Indirect investment vehicles.
    - ETFs, mutual funds, private equity funds, or master limited partnerships(MLP).
- **Risk and returns overview**
  - Risk depends on underlying asset.
  - An inherent risk to many infrastructure investments is regulatory risk.

9.8.2. 基础题

Q-44. Infrastructure investments may also be categorized by stage of development of the underlying assets. Investing in existing investable infrastructure assets may be referred to as:

A. brownfield investments.

B. greenfield investments.

C. redfield investment.

Q-45. Which of the following infrastructure investments would most likely be easiest to value?

A. private equity fund holding brownfield investments.

B. master limited partnership holding greenfield investments.

C. master limited partnership holding brownfield investments.

9.9. 进阶题

Q-1. An investor is seeking an investment that can take long and short positions, may use multi-strategies, and historically exhibits low correlation with a traditional investment Portfolio. The investor's goals will be best satisfied with an investment in:

A. real estate.

B. a hedge fund.

C. a private equity fund.

Q-2. If a commodity's forward curve is in contango, the component of a commodities futures return *most likely* to reflect this is:

A. spot prices.

B. the roll yield.

C. the collateral yield.

Q-3. When an investor hold the underlying asset of a future contract and concern about the backwardation in the future market, she will most likely:

A. Sell forward.

B. Buy forward.

C. Sell the asset.

Q-4. United Capital is a hedge fund with $250 million of initial capital. United Capital charges a 2% management fee based on assets under management at year end, and a 20% incentive fee based on returns in excess of an 8% hurdle rate. After one year operation, the fund appreciated 16%. Assume management fees are calculated using end-of-period valuation. The investor's net return assuming the performance fee is calculated net of the management fee is closest to:

A. 11.58%.

B. 12.54%.

C. 12.80%.

Q-5. High Plains Capital is a hedge fund with a portfolio valued at $950,000,000 at the beginning of the year. One year later, the value of assets under management is $1,083,000,000. The hedge fund charges a 2% management fee based on the end-of-year portfolio value as well as a 20% incentive fee. If the incentive fee and management fee are calculated independently, the effective return for a hedge fund investor is closest to:

A. 8.92%.

B. 9.06%.

C. 11.29%.

Q-6. Under the cost storage theory, which of the following conditions will attribute to backwardation?

A. When the storage costs is less than the convenience yield.

B. When the cost of carry exceeds the convenience yield.

C. When the roll yield is negative.

Solutions

I leave uncultivated today, was precisely yesterday perishes tomorrow which person of the body implored.

我无所事事地度过的今天是昨天死去的人们所奢望的明天。

9. Alternative Investments

9.1. 基础题

Q-1. Solution: B.

Adding an alternative investment to traditional investment portfolios is able to lower the total portfolio volatility because of the low correlation between these two assets. Also, the expected return will be higher due to the high return property of alternative investment.

Q-2. Solution: C.

C is correct. Alternative investments are less regulated and transparent than traditional investments such as equity and debt securities. A is incorrect because narrow manager specialization is a characteristic of alternative investments. B is incorrect because a characteristic of alternative investments is that the underlying investments are illiquid.

Q-3. Solution: B.

The use of estimates tends to smooth the return series. As a consequence, the volatility of returns will be understated.

Q-4. Solution: B.

Alternative investments are more likely characterized as having unique legal and tax considerations because of the broad range and complexity of the investments.

Q-5. Solution: C.

C is correct. Alternative investments are typically expected to have a lower level of regulation and less transparency than traditional long-only investments.bB is incorrect because alternative investments are often characterized by narrow manager specialization, as compared with traditional long-only investments. A is incorrect because alternative investments typically give the manager more flexibility to use derivatives and leverage, invest in illiquid assets, and take short positions, as compared with traditional investments.

Q-6. Solution: C.

A limited partnership that takes long and short positions in publicly traded equity is one type of hedge fund, a category of alternative assets.

Q-7. Solution: B.

The Sharpe ratio and the safety-first measure use standard deviation as the measure of risk, which ignore the negative skewness in returns. The Sortino ratio uses the downside deviation as the measure of risk, which will reflect negative skewness if present.

Q-8. Solution: B.

The exclusion of returns of funds that have been liquidated is called survivorship bias. It is most likely that only poor performers are eliminated and thus reported returns are artificially inflated.

Q-9. Solution: B.

B is correct because the risk/return profile of the overall portfolio will potentially improve. The overall risk will most likely drop, and the overall return will most likely rise.

Q-10. Solution: C.

Downside risk measures focus on the left side of the return distribution curve where losses occur. The standard deviation of returns assumes that returns are normally distributed. Many alternative investments do not exhibit close-to-normal distribution of returns, which is a crucial assumption for the validity of a standard deviation as a comprehensive risk measure. Assuming normal probability distributions when calculating these measures will lead to an underestimation of downside risk for a negatively skewed distribution. Both the Sortino ratio and the value-at-risk measure are both measures of downside risk.

Q-11. Solution: B.

A conservative and theoretically accurate approach is to use bid prices for longs and ask prices for shorts because these are the prices at which the positions could be closed.

A is incorrect because although using the average quote [(bid + ask)/2] is a common approach, a more conservative and theoretically accurate approach is to use bid prices for longs and ask prices for shorts as these are the prices at which the positions could be closed.

C is incorrect because when market prices or quotes are used for valuation, funds may differ in which price or quote they use (for example, bid price, ask price, average quote, and median quote).

Q-12. Solution: B.

Macro strategy invest based on “top-down” research. Mikey began with analyzing target countries and then moved on to industries, displaying a typical macro strategy.

Q-13. Solution: B.

B is correct. The use of derivatives is a typical feature of contemporary hedge funds.

A is incorrect. Hedge funds tend to impose restrictions on the withdrawal of funds.

C is incorrect. Investing in hedge funds is open only to a limited number of investors.

Q-14. Solution: B.

B is correct. The fees on funds of funds are usually higher. The fund of funds manager charges a fee, and there is a fee charged by each hedge fund. A is incorrect because this is an advantage of investing through funds of funds. C is incorrect because this is an advantage of investing through funds of funds.

Q-15. Solution: A.

A is correct. The investment strategy and process of a hedge fund is likely to be challenging to fully assess because hedge funds often limit disclosure in order to maintain their competitive advantage and to not give away information that is considered proprietary.

B is incorrect because the size and longevity of a hedge fund are common items for review and not as difficult to obtain as proprietary information.

C is incorrect because a hedge fund's track record should be readily available to investors.

Q-16. Solution: B.

B is correct. High-water marks help clients avoid paying twice for the same performance. When a hedge fund's value drops, the manager will not receive an incentive fee until the value of the fund returns to its previous level.

A is incorrect because high-water marks are not linked to prime brokerage fees.

C is incorrect because management fees are paid irrespective of returns.

Q-17. Solution: C.

AWJ fees

\$130 million × 2% = \$2.6 million management fee

(\$130 – \$100) million × 20% = \$6 million incentive fee

Total fees to AWJ Capital = \$8.6 million

Investor return: (\$130 – \$100 – \$8.6)/\$100 = 21.40%

Q-18. Solution: C.

Regardless of performance, the management fee is always paid to the fund manager.

Q-19. Solution: A.

Total fees earned by the hedge fund are closest to \$5.96 million:

Year-end value = \$225 million × 1.15 = \$258.75 million

Management fee = Year-end value × Management fee %

= \$258.75 million × 1% = \$2.5875 million

Incentive fee = (Year-end value – Beginning value) × Incentive fee %

= (\$258.75 million – \$225 million) × 10% = \$3.375 million

Total fees = Management fee + Incentive fee

= \$2.5875 million+ \$3.375 million = \$5.9625 million = \$5.96 million.

Q-20. Solution: B.

The \$240 million grows by 20% to \$288 million [= \$240 million × (1 + 0.2)]. The management fee is \$5.76 million (= \$288million × 0.02), leaving \$282.24 million, net of the management fee, or an increase of \$42.24million over the beginning value of \$240 million.

The 7% hurdle rate requires an increase of \$16.8 million (= \$240 million × 0.07), so the fund has earned \$25.44 million (= \$42.24 million – \$16.8million) over the hurdle rate, net of the management fee.

The incentive fee is 20% of this, or \$5.088 million (= \$25.44 million × 0.2), leaving an increase in fund assets, net of management and incentive fees, of \$37.152 million (=\$42.24 million – \$5.088 million) . The investor's return, net of fees, is \$37.152/\$240 million =15.48%.

Q-21. Solution: C.

Private equity management fees are based on the full amount of committed capital, whether drawn down or not, minus capital that has been returned to investors from investments that have been exited.

A is incorrect because it is hedge funds, not private equity funds, which base their management fees on the fair value of assets under management.

B is incorrect because private equity funds charge management fees on all committed capital, not just drawdowns, and do not charge management fees on capital gains.

Q-22. Solution: A.

Private equity funds and hedge funds are typically structured as partnerships where investors are limited partners (LP) and the fund is the general partner (GP). The management fee for private equity funds is based on committed capital whereas for hedge funds the management fees are based on assets under management. For most private equity funds, the general partner does not earn an incentive fee until the limited partners have received their initial investment back.

Q-23. Solution: B.

Formative-stage financing occurs when the company is still in the process of being formed and encompasses several financing steps. Angel investing capital is typically raised in this early stage of financing.

Q-24. Solution: A.

Hedge funds invest in securities and may take long and short positions. They may also employ leverage.

Q-25. Solution: C.

C is correct. Low leverage is an attractive feature of a target company in a leveraged buyout. This characteristic makes it easier for an acquirer to use debt to finance a large portion of the purchase price. A is incorrect. A substantial amount of physical assets is a desirable feature of a target company in a leveraged buyout. B is incorrect. A strong and sustainable cash flow is a desirable feature of a target company in a leveraged buyout.

Q-26. Solution: B.

Mezzanine-stage venture capital financing is provided to the firms which prepare to go public. It also represents the bridge between the expanding company and the IPO. Formative-stage financing occurs when the company is still in the process of being formed and encompasses several financial steps. Later stage financing is provided after commercial production and sales have begun but before any IPO.

Q-27. Solution: A.

Once a commitment in a private equity fund has been made, the investor has very limited liquidity options.

Q-28. Solution: C.

C is correct. The historical standard deviations of annual return for venture capital are higher than that of common stocks. Investors should therefore require a higher return in exchange for accepting this higher risk, along with the illiquidity of venture capital investing. A is incorrect because the venture capital strategy typically invests in start-up or early stage companies, not later stage companies. B is incorrect because venture capital investments require long time horizons.

Q-29. Solution: A.

Companies with large amounts of undervalued assets (which can be sold to reduce debt) that generate high levels of cash flow (which are used to make interest and principal payments on the debt) are likely candidates for MBO transactions.

Q-30. Solution: B.

B is correct. Support of product development and/or marketing efforts takes place during seed-stage financing.

A is incorrect. Support of initial commercial production and sales takes place during early stage financing.

C is incorrect. Support in the transformation of an idea into a business plan takes place during angel investing.

Q-31. Solution: C.

Venture capital is a private equity strategy in which private equity companies invest and get actively involved in the management of portfolio companies.

Q-32. Solution: B.

B is correct. Shares in real estate investment trusts are publicly traded and represent an equity investment in real estate. A is incorrect. Real estate limited partnerships are an example of a private real estate investment. C is incorrect. A collateralized mortgage obligation is an example of debt-based exposure to real estate.

Q-33. Solution: C.

Only properties that sell in each period and are included in the index and vary over time which may not be representative of the whole market.

Q-34. Solution: B.

Because no two properties are identical, homogeneity is not a feature of an investment in real estate.

Q-35. Solution: A.

Real estate limited partnerships are a form of private real estate investment.

Q-36. Solution: A.

Net operating income is the measure used in the direct capitalization approach. It is a proxy for the property level operating cash flow.

B is incorrect. Income taxes are not deducted when using the direct capitalization approach.

C is incorrect. Depreciation is not deducted when using the direct capitalization approach.

Q-37. Solution: B.

Collateral yield is the return on cash used as margin on derivatives used to gain commodity exposure.

A is incorrect because the convenience yield (also known as "roll yield") is the return from rolling forward the maturity of the derivatives position.

C is incorrect because price return is the difference between the forward and spot price.

Q-38. Solution: B.

Over the long term, commodity prices are closely related to inflation and thus including commodities in a portfolio of equities and bonds will reduce its exposure to inflation.

Q-39. Solution: A.

When a commodity market is in contango, futures prices are higher than spot prices. When spot prices are higher than the futures price, the market is said to be in backwardation.

Q-40. Solution: B.

B is correct. As the price increases of commodities are mirrored in higher price indexes, the nominal return is equal to inflation and thus the real return is zero. A is incorrect. A negative real return implies inflation greater than nominal return. This is not the case if commodity price increases determine inflation. C is incorrect. A positive real return implies inflation less than nominal return. This is not the case if commodity price increases determine inflation.

Q-41. Solution: A.

The three main sources of return for a commodities futures contract are collateral yield, roll yield, and spot price return

Q-42. Solution: C.

Since commodity indices are constructed using commodity futures and not the underlying commodities there can be differences between commodity index returns and the returns of the underlying commodities.

Q-43. Solution: A.

If a price curve for a commodity is in contango, the curve is most likely be upward slopping and the forward price for this commodity will be higher than the current price. In this case, only $80 is higher than the spot price of wheat.

Q-44. Solution: A.

Investing in existing investable infrastructure assets may be referred to as brownfield investments. Investing in infrastructure assets that are to be constructed may be referred to as investments.

Q-45. Solution: C.

A master limited partnership (MLP) is publicly traded, whereas a private equity fund is not. Therefore the MLP will have market pricing information to help with valuation. A brownfield investment is an existing asset that likely has operational and financial history to aid in valuation; whereas a greenfield investment is in new construction.

9.2. 进阶题

Q-1. Solution: B.

Hedge funds may use a variety of strategies (event-driven, relative value, macro and equity hedge), generally have a low correlation with traditional investments, and may take long and short positions.

Q-2. Solution: B.

Roll yield refers to the difference between the spot price of a commodity and the price specified by its futures contract (or the difference between two futures contracts with different expiration dates). When futures prices are higher than the spot price, the commodity forward curve is upward sloping, and the prices are referred to as being in contango. Contango occurs when there is little or no convenience yield.

Q-3. Solution: A.

A holder of an underlying asset will suffer from decreasing prices, thus he should sell a forward to lock his price at future price. Thus at expiration the payoff of the investor will be:

Cash received from selling asset: S_t

Exercise forward contract: $-(S_t-F_t)$

Payoff at expiration: $S_t - (S_t-F_t) = F_t$

Q-4. Solution: B.

The net investor return is 12.54%, calculated as:

End of year capital = \$250 million x 1.16 = \$290 million

Management fee = \$290 million x 2% = \$5.8 million

Hurdle amount 8% of \$250 million = \$20 million;

Incentive fee = (\$290 — \$250 — \$20 — \$5.8) million x 20% = \$2.84 million

Total fees to United Capital = (\$5.8 + \$2.84) million = \$8.64 million

Investor net return: (\$290 — \$250 — \$8.64) / \$250 = 12.54%

Q-5. Solution: A.

The management fee = \$1,083,000,000 × 0.02 = \$21,660,000.

The incentive fee = (\$1,083,000,000 – \$950,000,000) × 0.20 = \$26,600,000.

Total fees = \$48,260,000.

Return = (\$1,083,000,000– \$950,000,000 – \$48,260,000)/\$950,000,000 = 8.92%.

Q-6. Solution: A.

Futures price ≈ Spot price (1 + r) + Storage costs – Convenience yield

Storage cost < convenience yield

Future price < spot price, backwardation.