金程教育 GOLDEN FUTURE

2017 年 12 月 CFA 一级百题预测

1. **ETHICS**
2. **QUANTITATIVE**
3. **ECONOMICS**
4. **FINANCIAL STATEMENT ANALYSIS**
5. **CORPORATE FINANCE**
6. **EQUITY**
7. **FIXED INCOME**
8. **DERIVATIVES**
9. **ALTERNATIVE INVESTMENTS**
10. **PORTFOLIO**

对于 2017 年 12 月考试，从全局来看，考试的难度在提高；从科目来说，对于占比较高的几门科目需要引起重视，如：财务报表分析、职业伦理和数量分析；从题目的难易程度来说，百题中所标示的基础题目必须掌握。相比较于 2016 年考纲，改动较大的科目是职业伦理、经济学和企业理财，分别增加了一个全新的章节，基本都是定性的内容，百题中这部分的题目是来自原版书及 Mock 中的精选，复习时要花点时间重点掌握。为了全面应对考试，我们全面推出了的各种学习平台，如金程网校、手机 APP、金程 CFA 微信平台答疑等活动，请各位充分利用。如有学术问题，请登录至金程网校提问。祝大家好运！

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8. Derivatives

8.1. Derivatives Market and Instruments

8.1.1. 重要知识点

8.1.1.1. 衍生品的定义：**A derivative is a financial instrument (contract) that derives its performance from the performance of an underlying asset.**

8.1.1.2. 衍生品分类方法

- 根据合约特点分类：**Forward commitment & Contingent claim**
  - Forward commitment: is an agreement between two parties in which one party, the buyer, agrees to buy from the other party, the seller, an underlying asset at a future date at a price established at the start → forward, futures and swap contracts
  - Contingent claim: is derivative in which the payoffs occur if a specific event happens → option contracts
    - Credit default swaps (CDS) is essentially an insurance contract for the reference, the reference obligation is the fixed income security on which the swap is written-usually a bond but potentially also a loan.
    - Protection buyer receives a payment from the protection seller if default occurs on the reference entity.
- 根据交易场所分类：**Exchange-traded & Over-the-counter traded**
  - Exchange-traded: 在一个固定的交易所交易。多空双方不直接见面，与清算所交易。（A—>Clearinghouse—>B）
  - OTC traded: 没有固定交易场所，多空双方直接交易。（A—>B）

Exchange-traded	Over-the-counter
Standardized —> Liquid	Customized/Specific needs
Backed by a clearinghouse	Trade with counterparty (default risk)
Trade in a physical exchange	Not trade in organized markets
Regulated	Unregulated

  - Market makers: buy at one price (the bid), sell at a higher price (the ask), and hedge whatever risk they otherwise assume.

8.1.2. 基础题

Q-1. Which of the following is most representative of forward contracts and contingent claims?

	Forward Contracts	Contingent Claims
A.	Premium paid at inception	Premium paid at inception

B.	Premium paid at inception	No premium paid at inception
C.	No premium paid at inception	Premium paid at inception

Solution: C.

Unlike a contingent claim, a forward commitment typically requires no premium to be paid up front. An intuitive way to look at this is to realize that a forward commitment is binding on both parties, so any up-front fees would cancel, while a contingent claim is binding only on the party in the short position. For this, the party in the short position demands (and receives) compensation.

Q-2. A contract has no contingent claim and is also over the counter traded. Which of the following contract satisfies the characteristics?

A. Forward

B. Option

C. Futures

Solution: A.

Only forward contract has no contingent claim and over the counter traded.

Q-3. Which of the following statements is true about contingent claims?

A. Either party can default to the other

B. The payoffs are linearly related to the performance of the underlying

C. The most the long can lose is the amount paid for the contingent claim

Solution: C.

The maximum loss to the long is the premium. The payoffs of contingent claims are not linearly related to the underlying, and only one party, the short, can default.

Q-4. Which of the following derivatives is classified as a contingent claim?

A. Futures contracts

B. Interest rate swaps

C. Credit default swaps

Solution: C.

A credit default swap (CDS) is a derivative in which the credit protection seller provides protection to the credit protection buyer against the credit risk of a separate party. CDS are classified as a contingent claim.

A is incorrect because futures contracts are classified as forward commitments. B is incorrect because interest rate swaps are classified as forward commitments.

Q-5. Which of these is best classified as a forward commitment derivative?

A. A swap agreement

B. A convertible bond

C. An asset-backed security

Solution: A.

A swap agreement is equivalent to a series or forward agreements that are described as forward commitment derivatives.

Q-6. Which of the following statements most accurately describes exchange-traded derivatives relative to over-the-counter derivatives? Exchange-traded derivatives are more likely to have:

A. greater credit risk.

B. standardized contract terms.

C. greater risk management uses.

Solution: B.

Standardization of contract terms is a characteristic of exchange-traded derivatives. A is incorrect because credit risk is well-controlled in exchange markets. C is incorrect because the risk management uses are not limited by being traded over the counter.

Q-7. Which of the following characteristics is associated with over-the-counter derivatives?

A. Trading occurs in a central location

B. They are more regulated than exchange-listed derivatives

C. They are less transparent than exchange-listed derivatives

Solution: C.

OTC derivatives have a lower degree of transparency than exchange-listed derivatives. Trading does not occur in a central location but, rather, is quite dispersed. Although new national securities laws are tightening the regulation of OTC derivatives, the degree of regulation is less than that of exchange-listed derivatives.

Q-8. Market makers earn a profit in both exchange and over-the-counter derivatives markets by:

A. charging a commission on each trade.

B. a combination of commissions and markups.

C. buying at one price, selling at a higher price, and hedging any risk.

Solution: C.

Market makers buy at one price (the bid), sell at a higher price (the ask), and hedge whatever risk they otherwise assume. Market makers do not charge a commission. Hence, A and B are both incorrect.

8.2. Advantages & Disadvantages of Derivatives

8.2.1. 重要知识点

8.2.1.1. Advantages & disadvantages of derivatives

- **Advantage:**
  - Price discovery
  - Risk management: hedge and speculation
  - Lowering transaction costs
  - Low capital requirement
  - Greater liquidity
  - Ease of going short
  - Enhance market efficiency
- **Disadvantage:**
  - Too risky and High leverage
  - Complex instruments
  - Sometimes likened to gambling

8.2.2. 基础题

Q-9. Which of the following is not an advantage of derivative markets?

A. They are less volatile than spot markets

B. They facilitate the allocation of risk in the market

C. They incur lower transaction costs than spot markets

Solution: A.

Derivative markets are not by nature more or less volatile than spot markets. They facilitate risk allocation by making it easier and less costly to transfer risk, and their transaction costs are lower than those of spot markets.

Q-10. The reason that derivative markets have become popular is least likely to be that:

A. Derivatives often trade at relatively low costs.

B. Derivatives can be used to practice risk management.

C. Derivatives are tools that can be much easier to use.

Solution: C.

Derivatives have lower transaction costs relative to traditional investment and can be used for to manage risk. However derivatives are relatively more complex and difficult to pricing.

Q-11. Which of the following responds to the criticism that derivatives can be destabilizing to the underlying market?

A. Market crashes and panics have occurred since long before derivatives existed

B. Derivatives are sufficiently regulated that they cannot destabilize the spot market

C. The transaction costs of derivatives are high enough to keep their use at a minimum level

Solution: A.

Derivatives regulation is not more and is arguably less than spot market regulation, and the transaction costs of derivatives are not a deterrent to their use; in fact, derivatives are widely used. Market crashes and panics have a very long history, much longer than that of derivatives.

Q-12. Derivative markets serve a number of purposes in global economic systems. Which of the following is least likely one of these purposes?

A. Reveal prices and volatility of the underlying assets

B. Improve market efficiency by lowering transaction costs

C. Enable companies to more easily practice risk management

Solution: B.

Derivative markets improve market efficiency for the underlying assets by increasing market fairness and competitiveness, not by lowering transaction costs. Lower transaction cost is a characteristic of derivative markets that is required for them to exist, not a purpose for derivative markets.

8.3. Forward Contract

8.3.1. 重要知识点

8.3.1.1. Classification of forward contract

- Commodity forward contract

- Financial forward contract

8.3.1.2. Characteristics forward contracts

- Each party are exposed to default risk (or counterparty risk)
- Zero-sum game

8.3.1.3. Settling a forward contract

- **At expiration**
  - Physical settlement: deliver an actual asset，存在储存成本，多用于商品远期；
  - Cash settlement: the party that has a position with negative value is obligated to pay that amount to the other party，多用在金融远期。
- **Prior to expiration:**
  - Offsetting with a different party: some credit risk remains.
  - Offsetting with the original party: can avoid credit risk.

8.3.2. 基础题

Q-13. The usefulness of a forward contract is limited by some problems. Which of the following is most likely one of those problems?

A. Once you have entered into a forward contract, it is difficult to exit from the contract

B. Entering into a forward contract requires the long party to deposit an initial amount with the short party

C. If the price of the underlying asset moves adversely from the perspective of the long party, periodic payments must be made to the short party

Solution: A.

As opposed to a futures contract, trading out of a forward contract is quite difficult. There is no exchange of cash at the origination of a forward contract. There is no exchange on a forward contract until the maturity of the contract.

Q-14. Which of the following have the largest counterparty risk?

A. Option

B. Forward

C. Futures

Solution: B.

Forward contracts are traded on over-the-counter markets. They are largely unregulated markets and each contact is with a counterparty, which may expose the owner of a derivative to default risk.

Q-15. Two counterparties sign a forward contract on a stock, the underlying stock price goes up afterward, which counterparty/counterparty suffer from credit default risk?

A. The long position only

B. The short position only

C. Both long and short position

Solution: A.

Since long position gains positive profit when underlying price goes up, then long position may suffer from the credit default of the short position. So the long position only suffers from credit default risk when the underlying stock price goes up.