

## **Learning Module 3: Derivative Benefits, Risks, and Issuer and Investor Uses**

Q.1139 Which of the following is *most likely* a benefit of investing in derivatives markets?

- A. Derivatives markets are highly leveraged.
- B. Derivatives markets provide risk-free return.
- C. Derivatives markets distribute risk among market participants.

The correct answer is **C**.

The benefits of the derivatives markets are:

1. The market aids in price discovery. The futures price of oil, for instance, can be thought of as a forecast of the future spot price.
2. Derivatives have lower transaction costs than transacting in the equivalent underlying asset.
3. Derivatives also help to distribute risk among different participants, thus ensuring the long-term stability of financial markets.

**A is incorrect.** While it is true that derivatives markets are highly leveraged, which can amplify gains, it also significantly increases the risk of losses. Leverage allows investors to gain a large exposure to a financial asset with a relatively small initial investment. However, this can lead to substantial losses if the market moves against the investor's position. Therefore, high leverage is not inherently a benefit of investing in derivatives markets; rather, it is a feature that must be carefully managed to avoid excessive risk.

**B is incorrect.** Suggesting that derivatives markets provide a risk-free return is misleading. All investments, including derivatives, carry some level of risk. Derivatives are complex financial instruments that can be used for hedging purposes, which might reduce risk, but they can also be used for speculative purposes, which can significantly increase risk. It is crucial for investors to understand these risks and manage them appropriately.

***CFA Level I, Derivatives, Learning Module 3: Derivative Benefits, Risks, and Issuer and Investor Uses. LOS (a): Describe the benefits and risks of derivative instruments.***

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Q.3358 "Derivatives have benefits relative to trading the underlying." Which of the following would *least likely* refute the above statement?

- A. Higher transaction costs
- B. The use of a large amount of leverage
- C. Increase in the amount of speculative trading

The correct answer is **A**.

Derivatives have lower transaction costs relative to trading directly the underlying.

The other two options talk about the other benefits that come with derivatives.

**B is incorrect.** The use of a large amount of leverage is indeed a characteristic of derivatives that can amplify both gains and losses. While leverage allows investors to gain a larger exposure to the market with a relatively small amount of invested capital, it also increases the risk of significant losses. This aspect of derivatives could be seen as a drawback rather than a benefit, especially for investors who do not properly manage risk.

**C is incorrect.** An increase in the amount of speculative trading is another aspect of derivatives that could be viewed negatively. While derivatives can be used for hedging and risk management, they are also widely used for speculative purposes. Speculative trading can lead to increased volatility in the markets and can contribute to the formation of asset bubbles and subsequent crashes.

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Q.3370 Speculation through derivatives has a destabilizing consequence on markets as:

- A. Speculators employ high levels of leverage.
- B. Speculators are thought to engage in price manipulation.
- C. Derivatives are highly complex and easily misunderstood.

The correct answer is **A**.

Speculation through derivatives has a destabilizing consequence on markets as speculators use large amounts of leverage, thereby subjecting themselves and their creditors to substantial risk. If markets do not move in the hoped-for-direction, defaults by speculators can lead to defaults by their creditors and their creditors' creditors, and so on. The effects can be systematic and reflect an epidemic contagion whereby instability can spread throughout markets and the economy.

**B is incorrect.** While speculators are thought to engage in price manipulation and trade at extreme prices, this act does not have a destabilizing effect on the market.

**C is incorrect.** The highly complex nature of derivatives means they require a high level of understanding. This single fact has caused many to distrust derivatives.

***CFA Level I, Derivatives, Learning Module 3: Derivative Benefits, Risks, and Issuer and Investor Uses. LOS (a): Describe the benefits and risks of derivative instruments.***

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Q.4137 Which of the following is *least likely* a way derivative markets lead to efficient financial markets?

- A. Offering an effective way to exploit mispricing.
- B. Reflecting fundamental values earlier in the derivative market than in the cash market.
- C. Providing a price discovery function outside cash or spot markets.

The correct answer is **C**.

Providing a price discovery function outside cash or spot markets is a benefit of derivative instruments but not explicitly related to market efficiency.

**A and B are incorrect.** Offering an effective way to exploit mispricing and reflecting fundamental values earlier in the derivative market than in the cash market contribute to market efficiency.

***CFA Level I, Derivatives, Learning Module 3: Derivative Benefits, Risks, and Issuer and Investor Uses. LOS (b): Compare the use of derivatives among issuers and investors.***

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Q.4138 Which of the following is *least likely* an operational advantage of derivatives?

- A. Lower transaction costs.
- B. High liquidity.
- C. High upfront cash requirements.

The correct answer is **C**.

Cash market transactions refer to the buying and selling of assets, such as stocks or commodities, at their current market price. In these transactions, the buyer pays the full cost of the asset at the time of purchase.

Derivatives, on the other hand, are financial instruments whose value is derived from an underlying asset, such as a stock or commodity. Examples of derivatives include options and futures contracts.

Compared to cash market transactions, derivatives are typically associated with lower initial costs. This is because when trading derivatives, investors are only required to put up a small percentage of the total value of the contract as collateral, known as the "initial margin." This is in contrast to cash market transactions, where the full value of the asset must be paid upfront.

Additionally, derivatives also have lower premiums compared to cash market transactions. Premiums refers to the upfront cost of an option or futures contract. This is because derivatives have a built-in leverage, allowing investors to gain exposure to the underlying asset at a fraction of the cost of buying it outright in the cash market.

It's important to note that while the initial margin and premiums may be lower, derivatives also carry a higher level of risk, as the value of the contract is dependent on the performance of the underlying asset. It's important to understand the nature of the underlying asset, the terms and conditions of the derivatives contracts and the level of risk associated before investing in derivatives.

**A and C are incorrect.** Lower transaction costs and high liquidity are both operational advantages of derivatives.

**CFA Level I, Derivatives, Learning Module 3: Derivative Benefits, Risks, and Issuer and Investor Uses. LOS (a): Describe the benefits and risks of derivative instruments.**

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Q.4139 Which of the following is *least likely* a way in which counterparty credit risk can vary with different derivatives instruments and markets?

- A. Over-the-counter markets are associated with low counterparty risk due to the mark-to-market process and margining procedures.
- B. Exchange-traded derivatives are associated with low counterparty risk due to the mark-to-market process and margining procedures.
- C. Counterparty credit risk is prevalent in over-the-counter markets due to privately negotiated credit terms between counterparties.

The correct answer is **A**.

Over-the-counter (OTC) markets are generally associated with higher counterparty risk because the trades are privately negotiated between two parties and not cleared through a central counterparty, so there is more potential for default by one of the parties. The mark-to-market process and margining procedures used to mitigate counterparty risk may not be found in OTC markets.

**B is incorrect.** Exchange-traded derivatives typically have lower counterparty risk because trades are cleared through a central counterparty, which reduces the potential for default by one of the parties. Additionally, the mark-to-market process and margining procedures that are used to mitigate counterparty risk are more effectively enforced in exchange-traded markets.

**C is incorrect.** Over-the-counter markets entail higher counterparty risk due to the privately negotiated credit terms between the parties involved. This is because the counterparties often have more leeway to negotiate the terms of the trade, and the lack of a central counterparty further increases this risk.

**CFA Level I, Derivatives, Learning Module 3: Derivative Benefits, Risks, and Issuer and Investor Uses. LOS (a): Describe the benefits and risks of derivative instruments.**

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Q.4140 Which of the following is *most likely* an operational benefit of derivative instruments?

- A. Increased liquidity.
- B. Informational discovery.
- C. Greater potential for speculative use.

The correct answer is **A**.

Increased liquidity is one of the four operational benefits of using derivatives. Since less capital is needed to trade derivatives than to hold an equivalent amount of cash in underlying, derivative markets often have more liquidity. The other three operational benefits include low transaction costs, low upfront cash requirements, and a cheaper short position process.

**B is incorrect.** Information discovery is a benefit of using derivatives but not an operational advantage.

**C is incorrect.** Greater potential for speculative use is a risk of using derivatives.

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Q.4141 Which of the following is *most likely* the use of derivatives by both the issuers and the investors?

- A. Replicating cash market strategy.
- B. Changing exposure to an underlying asset price without transacting in the cash market.
- C. Offsetting or hedging market-based underlying exposures related to commercial operations and financing activities.

The correct answer is **B**.

Both the issuers and investors mainly use it to increase, decrease, or modify exposure to an underlying to meet their financial goals without transacting in the cash market.

**A is incorrect.** The investors use derivatives to replicate a cash market strategy, but not issuers.

**C is incorrect.** The issuers use derivatives to offset or hedge market-based underlying exposures related to their commercial operations and financing activities.

**CFA Level I, Derivatives, Learning Module 3: Derivative Benefits, Risks, and Issuer and Investor Uses. LOS (b): Compare the use of derivatives among issuers and investors.**

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Q.4142 Which of the following is *most likely* an example of a fair value hedge?

- A. Selling commodities forward in expectation of lower prices.
- B. An interest rate swap of a floating rate for a fixed debt.
- C. A currency forward to offset the foreign exchange risk of a foreign business operation.

The correct answer is **A**.

Selling commodities forward in anticipation of lower prices is an example of a fair value hedge because a fair value hedge applies when a derivative is deemed to offset the fluctuation in the fair value of an asset or liability.

**B is incorrect.** It is an example of a cash-flow hedge. A cash flow hedge is a type of hedge designation for derivatives that absorb the variable cash flow of a floating-rate asset or liability, such as foreign exchange, interest rates, or commodities. These hedges may be either forward commitments or contingent claims. Cash flow is used to reduce financial statement volatility by offsetting a hedging instrument (usually a derivative) against a hedged transaction or balance sheet item.

**C is incorrect.** It is an example of a net investment hedge. A net investment hedge is a type of hedge designation for derivatives used to offset the exchange rate risk of the equity of a foreign operation. This is achieved using either a foreign currency bond or a derivative such as an FX swap or forward. Using a net investment hedge is to reduce financial statement volatility by linking the recognition of derivative gains and losses with their designated risk management purpose.

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