Question #1 of 22

Consider the following two statements about exchange-traded funds:

Statement 1: Large ETF orders may incur price-impact costs

depending on the liquidity of the secondary market.

Statement 2: ETFs that track stable indices will have a lower

portfolio turnover cost.

It would be *most* accurate to state that:

A) both statements are correct.

Question ID: 1227974

B) only statement 1 is correct.

X

C) only statement 2 is correct.

X

Explanation

Both statements are correct. ETF costs include management fees and trading costs. Trading costs include brokerage or commission fees, and bid-ask spreads. Additionally, larger orders may incur price-impact costs depending on the liquidity of the secondary market. Portfolio turnover of ETFs results in an implicit cost which acts as a drag on returns for the investor. ETFs that track stable indices will have lower portfolio turnover cost.

(Study Session 16, Module 43.2, LOS 43.e)

Related Material

SchweserNotes - Book 5

Question #2 of 22

Question ID: 1227965

The arbitrage gap for an ETF is *most likely* to be narrow when:

A) the ETF and the securities underlying the ETF trade in the same market.

 \checkmark

B) the securities underlying the ETF are illiquid.

X

C) the ETF represents securities that are difficult to invest in directly.

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Since the liquidity of the securities in an ETF basket determines the transaction cost, the arbitrage gap tends to be wider for ETFs with illiquid holdings. Due to difference in time zones, an ETF on a foreign index may exhibit a difference between its NAV and the last closing price when the foreign market was open. This timing difference increases risk for the authorized participants (APs), leading to a wider arbitrage gap. This timing difference would *not* be present for an ETF and underlying securities trading in the same market. If the underlying securities are hard to invest in directly, the APs would not be able to create/redeem ETFs easily, leading to a larger arbitrage gap.

(Study Session 16, Module 43.1, LOS 43.a)

Related Material

SchweserNotes - Book 5

Question #3 of 22

Question ID: 1227966

ETFs trade in:

A) both primary and secondary markets.

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B) secondary markets only.

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C) primary markets only.

X

Explanation

ETFs trade on secondary markets, just as stocks and bonds do. Additionally, ETFs also trade on primary markets when authorized participants (APs) create or redeem ETFs.

(Study Session 16, Module 43.1, LOS 43.b)

Related Material

SchweserNotes - Book 5

Question #4 of 22

Question ID: 1227967

Bob Nelson, analyst for Sigma securities, is evaluating EUXL, a leveraged ETF on European stocks. While the ETF is listed on multiple exchanges, it primarily trades on OTC markets. Nelson would *most* accurately assume that:

A) The increased settlement complexity from fragmented markets will lead to an increase in the quoted spreads.

B) OTC quotes tend to be more "live" compared to exchange quotes.



C) The increased settlement complexity from fragmented markets will lead to a decrease in quoted spreads.



Explanation

European markets are fragmented across many exchanges and countries and a majority of ETF trades occur in the OTC markets, without "live" bid and offer prices. The added complexity in settlement may widen the quoted bid-ask spreads.

(Study Session 16, Module 43.1, LOS 43.b)

Related Material

SchweserNotes - Book 5

Question #5 of 22

Compared to long-term buy-and-hold ETF investors, investors that trade frequently are *most likely* to be concerned with:

A) tracking error.

X

Question ID: 1227975

Question ID: 1227976

B) management fees.

X

C) trading costs.

Explanation

Because trading costs are incurred at the time of transaction only, annualized trading costs diminish over a longer holding period. For investors that trade frequently, the spread and commission (part of trading cost) are far more important components of the total cost. For long-term, buy-and-hold investors, management fees are an important component of the cost.

(Study Session 16, Module 43.2, LOS 43.e)

Related Material

SchweserNotes - Book 5

Question #6 of 22

PSTO ETF is quoted at a bid-ask spread of 0.10%. ETF commissions are 0.04% of trade value. Management fees are 0.09% per year. The average annual total cost of holding the PSTO ETF for 3 years is *closest* to:

A) 0.18%

 \bigcirc

C) 0.21%



Explanation

Round-trip commission = $2 \times 0.04\% = 0.08\%$

Round-trip trading cost = round-trip commission + spread = 0.08% + 0.10% = 0.18%

Holding cost for 3 years = round-trip trading cost + management fees = 0.18% + (3 × 0.09%) = 0.45%

Average annual cost (for 3-year holding period) = 0.55% / 3 = 0.183%

(Study Session 16, Module 43.2, LOS 43.e)

Related Material

SchweserNotes - Book 5

Question #7 of 22

Question ID: 1227964

Which of the following is *least likely* a purpose of the in-kind creation/redemption of an ETF?

A) Tax efficiency.

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B) Narrowing the arbitrage gap.

C) Lower cost.



Explanation

The in-kind creation/redemption process serves three purposes: lower cost, tax efficiency and keeping market prices in line with NAV. Arbitrage gap is the band around NAV at which the ETF should trade at and is not affected by the in-kind creation/redemption process.

(Study Session 16, Module 43.1, LOS 43.a)

Related Material

SchweserNotes - Book 5

Question #8 of 22

Question ID: 1210765

It would be most accurate to state that ETF shares can be created or redeemed by:

A) a special group of institutional investors (APs) only.

B) accredited investors (i.e. qualified investors) only.

C) anyone, including individual investors using a brokerage account.



Explanation

The only investors who can create or redeem new ETF shares are a special group of institutional investors called authorized participants. ETFs' creation/redemption mechanism allows for the continuous creation and redemption of ETF shares.

(Study Session 16, Module 43.1, LOS 43.a)

Related Material

SchweserNotes - Book 5

Question #9 of 22

Settlement risk is *most likely* to be a concern for:

A) ETF investors where the ETF sponsors lend securities to short sellers for a fee.



Question ID: 1227978

B) ETFs using OTC derivative contracts.



C) Exchange traded notes.



Explanation

ETFs using OTC derivative contracts as part of their strategy expose investors to the settlement risk of such contracts. Credit risk of defaulting security borrowers is a security lending risk and is different from settlement risk. Exchange traded notes may expose ETN investors to counterparty risk.

(Study Session 16, Module 43.3, LOS 43.g)

Related Material

SchweserNotes - Book 5

Question #10 of 22

When an ETF trades on the primary market, this is *most likely* to refer to a trade that happens:

- **A)** on an exchange.
- **B)** between APs and issuers.
- **C)** over-the-counter.



Question ID: 1210766

ETFs trade on both the primary market (directly between issuers and APs) and on the secondary markets (over-the-counter or exchange-based trades, like listed equity).

(Study Session 16, Module 43.1, LOS 43.b)

Related Material

SchweserNotes - Book 5

Question #11 of 22

Exchange-traded notes (ETNs) are similar to exchange traded funds (ETFs), in that they both:

A) use the creation/redemption process.

Question ID: 1210768

B) hold underlying securities.

X

C) are subject to total default by the issuer.

X

Explanation

Both ETFs and ETNs use the creation/redemption process. Some ETFs may lend securities or use swaps, exposing the fund to some level of default risk. However ETNs are unsecured, unsubordinated debt notes and thus an ETN's theoretical counterparty risk is 100% in the event of a default by the underwriting bank. Unlike ETFs, ETNs do not hold the underlying securities.

(Study Session 16, Module 43.3, LOS 43.g)

Related Material

SchweserNotes - Book 5

Question #12 of 22

Question ID: 1227968

An ETF's tracking difference is *most accurately* measured as the:

A) difference between the ETF's return (based on its NAV) and the return on the index tracked.



B) annualized standard deviation of the differences between the daily returns of the ETF and its benchmark.



C) standard deviation of the difference in daily returns between the ETF and its benchmark.

Tracking difference is the divergence between an ETF's return (based on its NAV) and the return on the tracked index. This measure provides an indication of the ETF's ability to follow its underlying benchmark. Tracking error is the annualized standard deviation of the daily tracking difference.

(Study Session 16, Module 43.1, LOS 43.c)

Related Material

SchweserNotes - Book 5

Question #13 of 22

Which of the following is *most likely* to represent a passive strategy for constructing an ETF?

A) Representative sampling/optimization.

Question ID: 1227981

B) Alternative weighting.

C) Smart beta.



Explanation

Replicating index performance by using an optimized sample rather than investing in all the securities in the index is considered a *passive* ETF strategy. Active management strategies used in the construction of ETFs include factor (smart beta), discretionary active, alternatively weighted, dynamic asset allocation and multi-asset strategies.

(Study Session 16, Module 43.3, LOS 43.h)

Related Material

SchweserNotes - Book 5

Question #14 of 22

ETFs are *most likely* to underperform the benchmark by their:

A) expense ratio.

Question ID: 1227970

B) arbitrage gap.

C) tracking error.

ETFs generally underperform the benchmark by their expense ratio. Tracking error is the annualized standard deviation of daily tracking error (which captures the difference in returns between an ETF and its underlying benchmark). Tracking error may result in the ETF underperforming or outperforming the benchmark.

(Study Session 16, Module 43.1, LOS 43.c)

Related Material

SchweserNotes - Book 5

Question #15 of 22

An ETF is *least likely* to trade at a premium/discount to its NAV when:

A) the underlying securities are exchange-traded.

Question ID: 1227973

B) there are timing differences between the capture of the ETF trade price and the price used to calculate it's NAV.



C) the ETF is infrequently traded.



Explanation

Premiums or discounts on ETFs are most commonly caused by timing differences, ETFs on OTC bonds where no true closing price is available and when ETFs are traded infrequently (stale pricing).

(Study Session 16, Module 43.2, LOS 43.e)

Related Material

SchweserNotes - Book 5

Question #16 of 22

Question ID: 1210767

ETF ownership costs are *least likely* to be increased by:

A) security lending.



B) portfolio turnover.



C) bid-ask spreads.

The main components of ETF cost are the fund management fee, tracking error, portfolio turnover, trading costs (including commissions, bid-ask spreads, and premiums/discounts), taxable gains/losses, and security lending. These costs generally reduce returns, with the exception of security lending, which can be considered a "negative" cost as it generates additional income that offsets fund expenses. Security lending for an ETF typically means loaning a portion of portfolio holdings to short sellers.

(Study Session 16, Module 43.2, LOS 43.f)

Related Material

SchweserNotes - Book 5

Question #17 of 22

A large bank's decision to issue exchange traded notes (ETNs) that track the S&P500 index is *most likely* to be motivated by the belief that:

A) the return on the S&P 500 index would be higher than the bank's lending rate.

Question ID: 1227977

B) the yield on bank's unsecured debt would be higher than the swap fixed rate.

C) the return on the S&P 500 index would be lower than the bank's borrowing rate.

Explanation

If a large bank that wants to issue unsecured debt at a fixed interest rate finds that the rate demanded by the market is significantly higher than the swap fixed rate for same maturity, the bank may instead issue an ETN that pays the return on an equity index. The bank then would simultaneously enter into an equity swap as the equity return receiver and the (swap) fixed rate payer. The index return received is used to service the ETN and the bank's effective borrowing cost becomes the swap fixed rate.

(Study Session 16, Module 43.3, LOS 43.f)

Related Material

<u>SchweserNotes - Book 5</u>

Question #18 of 22

Question ID: 1227979



Zhang Wei, portfolio manager at Zenith Capital, makes the following two statements:

Statement 1: For ETFs, hard closures entail creation halts and

changes in investment strategy.

Statement 2: When a bank ETN issuer is no longer interested in

additional borrowings, the resulting creation halts

may cause those ETNs to trade at a discount.

Regarding the statements made by Wei, it would be *most* accurate to state that:

A) only statement 1 is correct.

B) neither statement is correct.

C) only statement 2 is correct.

Explanation

Both statements are incorrect. Soft closures entail creation halts and changes in investment strategy. When creations are halted by bank ETN issuers, those ETNs may trade at a significant premium to their NAV as the arbitrage mechanism breaks down.

(Study Session 16, Module 43.3, LOS 43.g)

Related Material

SchweserNotes - Book 5

Question #19 of 22

Question ID: 1227971

Spreads tend to be narrower for:

A) fixed-income ETFs (as compared to large-cap equity ETFs).

B) popular ETFs.

C) specialized ETFs such as those that track commodity indexes.

Explanation

The primary factors affecting ETF spreads are the liquidity and the market structure of the underlying securities. Popular, highly liquid ETFs tend to have smaller spreads. Fixed income ETFs tend to have larger spreads compared to large-cap equity ETFs. Specialized Mediatal Rot Certied Sport ETFs such as those that track commodities, volatility futures, or small-cap stocks tend to have wider spreads.

(Study Session 16, Module 43.2, LOS 43.d)

Related Material

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Question #20 of 22

Suppose that a particular mutual fund is benchmarked against a large-cap equity index. The fund manager unexpectedly receives a large inflow of cash and wants to quickly equitize this cash. The ETF strategy most appropriate in order for the fund manager to achieve this goal would be:

A) excess liquidity management.

Question ID: 1227980

B) portfolio completion.

C) portfolio liquidity management.

Explanation

Portfolio liquidity management entails equitizing excess cash. Portfolio completion strategies use ETFs to fill temporary gaps in portfolio allocation. Excess liquidity management is not a strategy defined in the CFA curriculum.

(Study Session 16, Module 43.3, LOS 43.h)

Related Material

SchweserNotes - Book 5

Question #21 of 22

Question ID: 1227972

The maximum spread on an ETF is *most likely* to be negatively related to the:

A) probability of authorized participants (APs) completing an offsetting the trade in secondary market.

B) spread quoted on the underlying securities.

C) risk premium demanded by the authorized participants (APs) for carrying the trade until the close of trading.

Explanation

The maximum spread on an ETF is positively related to creation/redemption fees plus other trading costs, spread on the underlying securities, risk premium for carrying the Makakaii Rok Certier eseon trade until close of trading, and AP's normal profit margin. Maximum spread is negatively related to the probability of offsetting the trade in the secondary market.

(Study Session 16, Module 43.2, LOS 43.d)

Related Material

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Question #22 of 22

All else constant, significant tracking error in an ETF is *most likely* to cause the ETF to:

A) outperform the underlying benchmark.

X

Question ID: 1227969

B) trade at a discount.

X

C) be a poor instrument for hedging an exposure to the underlying index.

V

Explanation

Tracking error results in divergence (positive or negative) between the ETF's performance and the performance of the underlying tracked index. This difference might make the ETF a poor hedging instrument to hedge an exposure to the underlying index. ETFs may trade at a premium or discount based on the size of the arbitrage gap and whether the sponsor has stopped creating new units. However, tracking error does not affect the arbitrage gap on an ETF.

(Study Session 16, Module 43.1, LOS 43.c)

Related Material

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