Reading 45: Security Market Indexes

Question #1 of 46

Question ID: 415199

When a security is added to a widely followed market index, the security's price is *most likely* to:

- ✓ **A)** increase.
- ✗ **B)** decrease.
- ✗ **C)** be unaffected.

Explanation

Adding a security to a market index typically causes an increase in that security's price as portfolio managers who track the index purchase the security.

References

Question From: Session 13 > Reading 45 > LOS f

Related Material:

- Key Concepts by LOS

Question #2 of 46

Question ID: 415174

A security market index is *best* described as a:

- ✗ **A)** directory of ticker symbols for the securities listed on a given market.
- ✓ **B)** group of securities selected to represent the performance of a security market.
- ✗ **C)** value used to adjust nominal security prices for the effects of inflation.

Explanation

A security market index is a group of securities (the constituent securities) designed to represent the performance of an asset class, security market, or market segment.

References

Question From: Session 13 > Reading 45 > LOS a

Related Material:

- Key Concepts by LOS

Question #3 of 46

Question ID: 415214

Which of the following sets of indexes are price-weighted?

- ✗ **A)** S&P 500 Index and Dow Jones Industrial Average.
- ✗ **B)** Dow Jones World Stock Index and Russell Index.

✓ **C)** Dow Jones Industrial Average and Nikkei Dow Jones Stock Market Average.

Explanation

The Dow Jones World Stock Index, the Russell Index, the S&P 500 Index, and Morgan Stanley Capital International Index are all market-value weighted. Only the Dow Jones Industrial Average and the Nikkei Dow Jones Stock Market Averages are price-weighted.

References

Question From: Session 13 > Reading 45 > LOS k

Related Material:

- Key Concepts by LOS

Question #4 of 46

Question ID: 415205

The Top Banking Index contains stocks in the finance industry that represent more than 90% of the total market capitalization for the finance industry. The index is *best* described as a:

✓ **A)** sector index.
✗ **B)** broad market index.
✗ **C)** style index.

Explanation

A sector index measures the returns for an industry sector such as financials. Style indexes measure the returns to strategies that are differentiated by market capitalization and by value or growth. A broad market index typically consists of constituent securities that represent 90% or more of the total market capitalization for a given market.

References

Question From: Session 13 > Reading 45 > LOS h

Related Material:

- Key Concepts by LOS

Question #5 of 46

Question ID: 415197

Reconstitution of an index refers to:

✗ **A)** adjusting the weights of the securities that constitute the index.
✗ **B)** changing the methodology used to calculate the value of the index.
✓ **C)** removing some securities from the index and adding others.

Explanation

Reconstitution begins with evaluating the securities in an index against the index's criteria. Securities that are no longer representative of the index are removed and replaced with different securities that do meet the criteria. Adjusting the weights of the securities that constitute an index is termed rebalancing.

References

Question From: Session 13 > Reading 45 > LOS f

Related Material:

- Key Concepts by LOS

Question #6 of 46

Question ID: 415182

Assume a stock index consists of many firms who have recently split their stock. Which of the following weighting schemes will see a bias due to the impact of stock splits?

✗ **A)** Market value-weighted series.

✓ **B)** Price-weighted series.

✗ **C)** Unweighted price series.

Explanation

Firms that split their stock price will have the identical weight before and after the split in both the unweighted and the market value-weighted series. However, in the price-weighted series, large successful firms will lose weight within the index due to simply splitting their stock. This creates a downward bias in a price-weighted series. Standard and Poor's 500 Index is a market value-weighted index.

References

Question From: Session 13 > Reading 45 > LOS d

Related Material:

- Key Concepts by LOS

Question #7 of 46

Question ID: 415191

What is the price-weighted index of the following three stocks?

As of December 31, 2001		
Company	*Stock Price*	*Shares Outstanding*
A	$50	10,000
B	$35	20,000
C	$110	30,000

✓ **A)** 65.

✗ **B)** 75.

✗ **C)** 80.

Explanation

The price-weighted index equals [(50 + 35 + 110) / 3] = 65.

References

Question From: Session 13 > Reading 45 > LOS e

Related Material:

- Key Concepts by LOS

Question #8 of 46

Question ID: 656238

The table below lists information on price per share and shares outstanding for three companies-Lair Enterprises, Kurlew, Inc., and Mowe, Ltd.

	As of Beginning of Year		*As of End of Year*	
Stock	*Price Per Share ($)*	*# Shares Outstanding*	*Price Per Share ($)*	*# Shares Outstanding*
Lair	15	10,000	10	10,000
Kurlew	45	5,000	60	5,000
Mowe	90	500	110	500

Assume that at the beginning of the year, the value of the market-weighted index was 100. The one-year return on the market-cap weighted index is *closest* to:

✗ **A)** 30.0%.

✓ **B)** 8.33%.

✗ **C)** 13.33%.

Explanation

Expand the table as follows:

	As of Beginning of Year 1			*As of End of Year 1*		
Stock	*Price Per Share (in $)*	*# Shares Outstanding*	*Market Capitalization (in $)*	*Price Per Share (in $)*	*# Shares Outstanding*	*Market Capitalization (in $)*
Lair	15	10,000	150,000	10	10,000	100,000
Kurlew	45	5,000	225,000	60	5,000	300,000
Mowe	90	500	45,000	110	500	55,000
Total	*150*		*420,000*	*170*		*455,000*

First, we will calculate the year-end market-cap weighted index value, then we will calculate the return percentage.

Value of market-cap weighted index = [(market capitalization$_{\text{year-end}}$) / (market capitalization$_{\text{beginning of year}}$)] × Beginning index value
= (455,000 / 420,000) × 100 = 108.33

One-Year Return = [(Index value$_{\text{year-end}}$ / Index value$_{\text{beginning of year}}$) − 1] × 100
= [(108.33 / 100) − 1] × 100 = **8.33%**.

References

Question From: Session 13 > Reading 45 > LOS e

Related Material:

- Key Concepts by LOS

Question #9 of 46

Question ID: 415216

Which of the following equity indexes is an example of a market capitalization weighted index?

✓ **A)** MSCI All Country World Index.

✗ **B)** Dow Jones Industrial Average.

✗ **C)** Nikkei Stock Average.

Explanation

The MSCI All Country World Index is a market capitalization weighted index. The Dow Jones Industrial Average and the Nikkei Stock Average are price-weighted indexes.

References

Question From: Session 13 > Reading 45 > LOS k

Related Material:

- Key Concepts by LOS

Question #10 of 46

Question ID: 485802

Six months after inception, the price return and the total return of an equal-weighted index will be different if:

✗ **A)** market prices have not changed.

✓ **B)** constituent securities have paid dividends.

✗ **C)** capital gains exceed capital losses or vice versa.

Explanation

The difference between a price and total return index is that cash distributions are included in a total return index. The two will differ when the constituent securities make cash distributions over the period. Otherwise, the two versions will be the same.

References

Question From: Session 13 > Reading 45 > LOS b

Related Material:

- Key Concepts by LOS

Question #11 of 46

Question ID: 415177

The value of a total return index:

✓ **A)** can be calculated by multiplying the beginning value by the geometrically linked series of periodic total returns.

✗ **B)** is determined by the price changes of the securities that constitute the index.

✗ **C)** may increase at either a faster or slower rate than the value of a price return index with the same constituent securities and weights.

Explanation

The value of a total return index can be calculated by multiplying the beginning value by the geometrically linked series of index total returns. The value of a total return index includes both the price changes of the securities that constitute the index and any cash flows from the securities (dividends, interest, and other distributions). A total return index cannot increase at a slower rate (or decrease at a faster rate) than an otherwise identical price return index because cash flows from the securities cannot be negative.

References

Question From: Session 13 > Reading 45 > LOS b

Related Material:

- Key Concepts by LOS

Question #12 of 46

Question ID: 415190

An index was recently begun with the following two stocks:

- Company A - 50 shares valued at $2 each.
- Company B - 10 shares valued at $10 each.

Given that the value-weighted index was originally set at 100 and Company A's stock is currently selling for $4 per share while Company B's stock is still at $10 per share, what is the current value of the price-weighted index and the market-cap-weighted index?

	Price-weighted	Market-cap-weighted
✓ **A)**	7	150
✗ **B)**	7	300
✗ **C)**	8	150

Explanation

Price weight = [(4) + (10)] / 2 = 7

Market-cap weight = [(4)(50) + (10)(10)] / [(2)(50) + (10)(10)](100) = 150

References

Question From: Session 13 > Reading 45 > LOS e

Related Material:

- Key Concepts by LOS

Question #13 of 46

Question ID: 415193

Use the data below to determine which of the statements is *most* accurate?

As of December 31		
Company	*Stock Price*	*Shares Outstanding*
A	$25	20,000
B	$50	20,000
C	$100	10,000

✓ **A)** A 100% increase in the stock price of Company A will have a smaller impact on the price-weighted index than a 100% increase in the stock price of Company C.

✗ **B)** For a given percentage change in the stock price, Company B will have less of an impact on the market-cap weighted index as Company C.

✗ **C)** For a given percentage change in the stock price, Company A will have a greater impact on the market-cap weighted index than Companies B or C.

Explanation

A 100% change in the stock price of Company C will have a larger impact than a 100% change in either stocks A or B on the price-weighted index. A price-weighted index adds together the market price of each stock in the index and then divides this total by the number of stocks in the index. The price-weighted index assumes you purchase one share of each stock represented in the index. The price-weighted index is influenced most by given percentage changes in the higher priced stocks.

References

Question From: Session 13 > Reading 45 > LOS e

Related Material:

- Key Concepts by LOS

Question #14 of 46

Question ID: 415212

Voluntary reporting of performance by hedge fund managers leads to:

✗ **A)** no appreciable bias in hedge fund index returns.

✓ **B)** an upward bias in hedge fund index returns.

✗ **C)** a downward bias in hedge fund index returns.

Explanation

Empirical studies have shown that since hedge fund managers have the option to report performance results only funds with good results will report. Since funds with poor performance do not report their results, the results of hedge fund indexes will be biased upwards.

References

Question From: Session 13 > Reading 45 > LOS j

Related Material:

- Key Concepts by LOS

Question #15 of 46

Question ID: 415206

Which of the following statements regarding bond market indexes is *least* accurate?

- ✗ **A)** There are more bond issues than stocks.
- ✗ **B)** Unlike stocks, bonds lack continuous price trading data.
- ✓ **C)** The bond universe is more stable than the stock universe.

Explanation

One reason why the creation of a bond index is more difficult than a stock index is due to the fact that the universe of bonds is constantly changing because of numerous new issues, bond maturities, calls, and bond sinking funds.

References

Question From: Session 13 > Reading 45 > LOS i

Related Material:

- Key Concepts by LOS

Question #16 of 46

Question ID: 415215

Equal weighting is the most common weighting methodology for indexes of which of the following types of assets?

- ✓ **A)** Hedge funds.
- ✗ **B)** Equities.
- ✗ **C)** Fixed income securities.

Explanation

Most hedge fund indexes are equal-weighted. Equity and fixed income indexes are predominately market capitalization weighted.

References

Question From: Session 13 > Reading 45 > LOS k

Related Material:

- Key Concepts by LOS

Question #17 of 46

Question ID: 415207

Which of the following is NOT a reason bond market indexes are more difficult to create than stock market indexes?

- ✓ **A)** Bond deviations tend to be relatively constant.
- ✗ **B)** The universe of bonds is much broader than that of stocks.
- ✗ **C)** There is a lack of continuous trade data available for bonds.

Explanation

Bond prices are quite volatile as measured by the bond's duration.

References

Question From: Session 13 > Reading 45 > LOS i

Related Material:

- Key Concepts by LOS

Question #18 of 46

Question ID: 415185

In a market-capitalization weighted index firms with:

- ✗ **A)** higher stock prices have greater impacts on the index.
- ✗ **B)** larger market caps have lesser impacts on the index.
- ✓ **C)** greater market caps have greater impacts on the index.

Explanation

In a value weighted index, firms with greater market caps have a greater impact on the index than firms with lower market caps. A higher stock price does not necessarily mean a higher market cap.

References

Question From: Session 13 > Reading 45 > LOS d

Related Material:

- Key Concepts by LOS

Question #19 of 46

Question ID: 415211

Which of the following statements is *most accurate* regarding commodity indexes?

- ✓ **A)** Weighting methodology varies among index providers and leads to differences in index risk and returns.
- ✗ **B)** The return to commodity indexes consists of two major components: the risk-free rate of return and the roll yield.
- ✗ **C)** Commodity indexes are based on spot prices, while most investors purchase futures contracts.

Explanation

Weighting methodology is a major issue for commodity indexes. Several different methodologies are used, including equal weighting and global production values. Differences in weighting cause differing exposures for the indexes and lead to different risk and return profiles.

Commodity indexes represent futures contracts on commodities, not the actual spot prices of commodities. Commodity index returns come from three sources: the risk-free rate of return, changes in futures prices, and the roll yield.

References

Question From: Session 13 > Reading 45 > LOS j

Related Material:

- Key Concepts by LOS

Question #20 of 46

Question ID: 415200

The *most* appropriate benchmark for measuring the relative performance of an investment manager is:

✗ **A)** the risk-adjusted return on the market portfolio.

✗ **B)** a broad market index.

✓ **C)** an index that closely matches the manager's investment approach.

Explanation

An index chosen as a benchmark for an investment manager's performance should include securities in the manager's investment universe. For example, the performance of an emerging market bond fund manager should be measured relative to the performance of an emerging market bond index.

References

Question From: Session 13 > Reading 45 > LOS g

Related Material:

- Key Concepts by LOS

Question #21 of 46

Question ID: 415180

The first step in developing a security market index is choosing the index's:

✓ **A)** target market.

✗ **B)** constituent securities.

✗ **C)** weighting method.

Explanation

The first decision that must be made is choosing the target market the index will represent. Only then can the index provider determine which constituent securities should be included and which weighting scheme is most appropriate to measure the target market's returns.

References

Question From: Session 13 > Reading 45 > LOS c

Related Material:

- Key Concepts by LOS

Question #22 of 46

Question ID: 415209

Which of the following statements regarding fixed income indexes is *most accurate*?

- ✗ **A)** It is typically easier for portfolio managers to replicate a fixed income index than an equity index.
- ✗ **B)** Compared to stock indexes, turnover is typically lower in fixed income indexes.
- ✓ **C)** Because some fixed income securities are illiquid, indexes may include estimates of value.

Explanation

Because some fixed income securities are illiquid, a lack of recent trade prices may result in indexes having to estimate values. Unlike stocks, bonds mature and must be replaced in fixed income indexes. As a result turnover is higher in fixed income indexes. Illiquidity, transaction costs, and high turnover make it more expensive and difficult for a portfolio manager to replicate a fixed income index than a stock index.

References

Question From: Session 13 > Reading 45 > LOS i

Related Material:

- Key Concepts by LOS

Question #23 of 46

Question ID: 485803

Compared to a value-weighted index, the type of index *most likely* to have a value tilt is a(n):

- ✓ **A)** fundamental-weighted index.
- ✗ **B)** equal-weighted index.
- ✗ **C)** price-weighted index.

Explanation

An index based on company fundamentals, for example on earnings or book value, will assign more weight to stocks with low P/E or price-to-book ratios compared to a value-weighted index. This is similar to managing an equity portfolio using a value strategy.

References

Question From: Session 13 > Reading 45 > LOS e

Related Material:

- Key Concepts by LOS

Question #24 of 46

Question ID: 415179

The value of a security market index at the end of December is 1,200. The index returns for the next six months are:

Month	Return
January	3.89%
February	8.76%

March	−4.74%
April	6.88%
May	−5.39%
June	−8.12%

The index value at the end of June is *closest to*:

- ✗ **A)** 1,186.
- ✗ **B)** 1,214.
- ✓ **C)** 1,200.

Explanation

The index value at the end of June is
1,200(1.0389)(1.0876)(0.9526)(1.0688)(0.9461)(0.9188) = 1,200.

Note that the compound rate of return is
(1.0389)(1.0876)(0.9526)(1.0688)(0.9461)(0.9188)−1 = 0.

References

Question From: Session 13 > Reading 45 > LOS b

Related Material:

- Key Concepts by LOS

Question #25 of 46

Question ID: 415186

Which of the following statements about indexes is CORRECT?

- ✗ **A)** A market weighted series must adjust the denominator to reflect stock splits in the sample over time.
- ✓ **B)** A price-weighted index assumes an equal number of shares (one of each stock) represented in the index.
- ✗ **C)** An equal weighted index assumes a proportionate market value investment in each company in the index.

Explanation

The descriptions of value weighted and unweighted indexes are switched. The denominator of a price-weighted index must be adjusted to reflect stock splits and changes in the sample over time. A market value-weighted series assumes you make a proportionate market value investment in each company in the index.

References

Question From: Session 13 > Reading 45 > LOS d

Related Material:

- Key Concepts by LOS

Question #26 of 46

Question ID: 415198

The providers of the Smith 30 Stock Index remove Jones Company from the index because it has been acquired by another firm, and replace it with Johnson Company. This change in the index is *best* described as an example of:

- ✓ **A)** reconstitution.
- ✗ **B)** rebalancing.
- ✗ **C)** redefinition.

Explanation

Reconstitution refers to changing the securities that make up an index. Reconstitution of an index is required if one of its constituent securities goes out of existence (for example, a maturing bond or an expiring futures contract) or no longer meets the requirements to be included in the index.

References

Question From: Session 13 > Reading 45 > LOS f

Related Material:

- Key Concepts by LOS

Question #27 of 46

Question ID: 415204

Which type of security market index provides a measure of a market's overall performance and usually contains a significant portion of the market's total value?

- ✗ **A)** Style indexes.
- ✓ **B)** Broad market indexes.
- ✗ **C)** Sector indexes.

Explanation

A broad market index typically consists of securities that represent 90% or more of the total market capitalization for a given market. The object of a broad market index is to provide a measure for the performance of the total market. A sector index measures the returns for an industry sector such as financials. Style indexes measure the returns to strategies that are differentiated by market capitalization and by value or growth.

References

Question From: Session 13 > Reading 45 > LOS h

Related Material:

- Key Concepts by LOS

Question #28 of 46

Question ID: 498771

Which of the following is *least likely* required when defining a security market index? The:

- ✓ **A)** number of securities in the index.
- ✗ **B)** weighting method for the index.

✗ **C)** target market the index will represent.

Explanation

A market index does not necessarily have to consist of a fixed number of securities. For example, some indices are defined to include all the stocks that trade on a certain exchange, a number that can vary over time.

References

Question From: Session 13 > Reading 45 > LOS c

Related Material:

- Key Concepts by LOS

Question #29 of 46

Question ID: 415213

Which of the following indexes is a price weighted index?

✗ **A)** The New York Stock Exchange Index.

✓ **B)** The Nikkei Dow Index.

✗ **C)** The Standard and Poor's Index.

Explanation

The Nikkei Dow Index is a price-weighted index. The other two are market value-weighted indexes.

References

Question From: Session 13 > Reading 45 > LOS k

Related Material:

- Key Concepts by LOS

Question #30 of 46

Question ID: 415176

The measure of return on a security market index that includes any dividends or interest paid by the securities in the index is known as the:

✗ **A)** cash flow return.

✗ **B)** price return.

✓ **C)** total return.

Explanation

The total return on a security market index includes cash flows from the securities (dividends and interest) as well as price changes.

References

Question From: Session 13 > Reading 45 > LOS b

Related Material:

- Key Concepts by LOS

Question #31 of 46

Question ID: 415178

An index provider maintains a price index and a total return index for the same 40 stocks. Assuming both indexes begin the year with the same value, the total return index at the end of the year will be:

- ✗ **A)** less than the price index if the price index increases and greater than the price index if the price index decreases.
- ✓ **B)** equal to the price index if the constituent stocks do not pay dividends.
- ✗ **C)** greater than the price index.

Explanation

A price index only includes the prices of the constituent securities in the calculation of the index value. A total return index includes the prices and the dividends paid in the calculation of the index value. If all of the constituents are non-dividend paying stocks, then the total return index will be the same as the price index at the end of the year. Otherwise the total return index will be greater than the price index.

References

Question From: Session 13 > Reading 45 > LOS b

Related Material:

- Key Concepts by LOS

Question #32 of 46

Question ID: 415173

When using a security market index to represent a market's performance, the performance of that market over a period of time is *best* represented by:

- ✗ **A)** the index value.
- ✗ **B)** the change in the index value.
- ✓ **C)** the percent change in the index value.

Explanation

Percentage changes in the value of a security market index over time represent the performance of the market, segment, or asset class from which the securities are chosen.

References

Question From: Session 13 > Reading 45 > LOS a

Related Material:

- Key Concepts by LOS

Question #33 of 46

Question ID: 415202

An analyst using the capital asset pricing model is *most likely* to use a security market index as a proxy for:

- ✓ **A)** the market return.
- ✗ **B)** the risk-free rate.
- ✗ **C)** beta.

Explanation

The return on a security market index can be used as a proxy for the market return in a pricing model such as the CAPM.

References

Question From: Session 13 > Reading 45 > LOS g

Related Material:

- Key Concepts by LOS

Question #34 of 46

Question ID: 415201

Contreras Fund is a mutual fund that invests in value stocks. The *most appropriate* type of equity index to use as a benchmark of manager performance for Contreras Fund is a:

- ✓ **A)** style index.
- ✗ **B)** sector index.
- ✗ **C)** broad market index.

Explanation

The index selected as a benchmark for manager performance should represent the investment universe from which the manager actually selects stocks. If the manager only invests in value stocks, then the most appropriate index is a style index that seeks to represent the returns from a value strategy. A sector index is appropriate for managers who invest in specific sectors (e.g., technology stocks, emerging market bonds).

References

Question From: Session 13 > Reading 45 > LOS g

Related Material:

- Key Concepts by LOS

Question #35 of 46

Question ID: 415210

Commodity price indexes are based on the prices of:

- ✗ **A)** real assets such as grains, oil, and precious metals.
- ✗ **B)** commodities.
- ✓ **C)** futures contracts.

Explanation

The constituent securities of commodity price indexes are commodity futures contracts. As a result, the return on a commodity index can be different than the returns from holding the constituent commodities themselves.

References

Question From: Session 13 > Reading 45 > LOS j

Related Material:

- Key Concepts by LOS

Question #36 of 46

Question ID: 415184

Which of the following statements *best* describes the investment assumption used to calculate an equal weighted price indicator series?

✗ **A)** An equal number of shares of each stock are used in the index.

✓ **B)** An equal dollar investment is made in each stock in the index.

✗ **C)** A proportionate market value investment is made for each stock in the index.

Explanation

An equal weighted price indicator series assumes that an equal dollar investment is made in each stock in the index. All stocks carry equal weight regardless of their price or market value.

References

Question From: Session 13 > Reading 45 > LOS d

Related Material:

- Key Concepts by LOS

Question #37 of 46

Question ID: 415187

With regard to stock market indexes, it is *least likely* that:

✓ **A)** a market-cap weighted index must be adjusted for stock splits but not for dividends.

✗ **B)** buying 100 shares of each stock in a price-weighted index will result in a portfolio that tracks the index quite well.

✗ **C)** the use of price weighting versus market value weighting produces a downward bias on the index.

Explanation

A price-weighted index needs to be adjusted for stock splits, but a market-cap weighted index does not. Neither type of index considers dividend income unless it is designed as a total return index.

Price weighting produces a downward bias compared to market weighting because firms that split their stocks (which tend to be the more successful firms) decrease in weight within a price-weighted index. The returns on a price-weighted index can be matched by purchasing a portfolio with an equal number of shares of each stock in the index.

References

Question From: Session 13 > Reading 45 > LOS d

Related Material:

- Key Concepts by LOS

Question #38 of 46

Question ID: 415192

What is the market-cap weighted index of the following three stocks assuming the beginning index value is 100 and a base value of $150,000?

As of December 31		
Company	*Stock Price*	*Shares Outstanding*
X	$1	5,000
Y	$20	2,500
Z	$60	1,000

✓ **A)** 77.

✗ **B)** 30.

✗ **C)** 100.

Explanation

The market-cap weighted index = [(($1)(5,000) + ($20)(2,500) + ($60)(1,000))/$150,000](100)

= ($115,000/$150,000)(100)

= (0.767)(100)

= 76.67 or 77

References

Question From: Session 13 > Reading 45 > LOS e

Related Material:

- Key Concepts by LOS

Question #39 of 46

Question ID: 415181

The target market for a security market index is *best* described as the:

✗ **A)** consumers who will purchase the licensing rights for the index.

✗ **B)** securities that are included in the index.

✓ **C)** market or segment the index is designed to measure.

Explanation

The target market of an index is the securities market or portion of a securities market that the index will be designed to represent. The securities from the target market that are included in the index are called its constituent securities.

References

Question From: Session 13 > Reading 45 > LOS c

Related Material:

- Key Concepts by LOS

Question #40 of 46

Question ID: 415188

James Investments is calculating an equally weighted index on a four stock portfolio.

Stock	*Number of Shares*	*Initial Cost*	*Current Cost*
W	100	5.00	5.00
X	1,000	10.00	12.50
Y	500	7.50	10.00
Z	1500	5.00	8.00

If the initial index value is 100, the current index is *closest* to:

✗ **A)** 137.9.

✓ **B)** 129.5.

✗ **C)** 142.6.

Explanation

First calculate the return relatives and then find the mean of the relatives. The number of shares is irrelevant in this question.

> 5/5 = 1
> 12.5/10 = 1.25
> 10/7.50 = 1.33
> 8/5 = 1.60

(1 + 1.25 + 1.33 + 1.60) / 4 = 1.295
100 × 1.295 = 129.5

References

Question From: Session 13 > Reading 45 > LOS e

Related Material:

- Key Concepts by LOS

Question #41 of 46

Question ID: 496423

Which of the following statements about a security market index is *most accurate*?

✗ **A)** If an index increases by 5% in one year, the market return for the year is 5%.

✓ **B)** An index may reflect dividends paid by its constituent securities.

✗ **C)** An index must use actual prices from market transactions.

Explanation

An index that is designed to measure total return will include dividends in its calculation. Some security market indices use estimated prices when actual prices are not available. The percent change in a security market index is the return on a portfolio of its constituent securities. Whether this represents an estimate of the market return depends on the nature and purpose of the index (for example, a security market index may be designed to represent a particular industry or asset class).

References

Question From: Session 13 > Reading 45 > LOS a

Related Material:

- Key Concepts by LOS

Question #42 of 46

Question ID: 415175

In one year, a security market index has the following quarterly price returns:

First quarter	3%
Second quarter	4%
Third quarter	-2%
Fourth quarter	5%

The price return for the year is *closest to*:

✗ **A)** 9.9%.

✗ **B)** 10.0%.

✓ **C)** 10.2%.

Explanation

Return for the year = (1.03)(1.04)(0.98)(1.05) − 1 = 10.23%.

References

Question From: Session 13 > Reading 45 > LOS b

Related Material:

- Key Concepts by LOS

Question #43 of 46

Question ID: 415183

Which of the following weighting schemes will produce a downward bias on the index due to the occurrence of stock splits by firms in the index?

✗ **A)** Equal weighted price indicator series.

✗ **B)** Market-cap weighted series.

✓ **C)** Price-weighted series.

Explanation

The price-weighting scheme sums the market price of each of the stocks contained in the index and then divides this sum by the number of stocks in the index. Thus if a firm executes a stock split thereby reducing its share price, this will cause a downward bias in the index.

References

Question From: Session 13 > Reading 45 > LOS d

Related Material:

- Key Concepts by LOS

Question #44 of 46

Question ID: 415203

An equity index comprised of value stocks, identified by their price-to-earnings ratios, is *best* described as a:

✗ **A)** fundamental weighted index.
✗ **B)** sector index.
✓ **C)** style index.

Explanation

An index of value stocks is an example of a style index. Sector indexes measure the performance of securities in specific industries or industry sectors. Fundamental weighting is used to weight indexes by a factor such as the size of the firms or economies represented in the index.

References

Question From: Session 13 > Reading 45 > LOS h

Related Material:

- Key Concepts by LOS

Question #45 of 46

Question ID: 415189

The table below lists information on price per share and shares outstanding for three stocks.

	As of Beginning of Year		*As of End of Year*	
Stock	*Price per Share ($)*	*# Shares Outstanding*	*Price per Share ($)*	*# shares Outstanding*
Mertz	10	10,000	15	10,000
Norton	50	5,000	50	5,000
Rubble	100	500	85	500

At the beginning of the year, the value of a market-cap weighted index of these three stocks was 100. The index value at year-end is *closest to:*

✓ **A)** 110.6

✗ **B)** 93.8

✗ **C)** 44.3

Explanation

Market-cap weighted index = (ending market capitalization / beginning market capitalization) × beginning index value.

Beginning market capitalization = (10)(10,000) + (50)(5,000) + (100)(500) = 400,000

Ending market capitalization = (15)(10,000) + (50)(5,000) + (85)(500) = 442,500

Index value = (442,500 / 400,000) × 100 = 110.625

References

Question From: Session 13 > Reading 45 > LOS e

Related Material:

- Key Concepts by LOS

Question #46 of 46

Question ID: 415208

Ken Miller, CFA, wants to compare the returns on government agency bonds to the returns on corporate bonds. Peg Egan, CFA, wants to compare the returns on high yield bonds in developed markets to the returns on investment grade bonds in emerging markets. Which of these analysts is *most likely* able to use bond indexes for their analysis?

✓ **A)** Both of these analysts.

✗ **B)** Neither of these analysts.

✗ **C)** Only one of these analysts.

Explanation

Because of the wide universe of bonds that trade in financial markets, indexes are available (or can be constructed) based on virtually any feature or classification of bonds.

References

Question From: Session 13 > Reading 45 > LOS i

Related Material:

- Key Concepts by LOS