

Reading 54: Understanding Fixed-Income Risk and Return

Question #1 of 92

Question ID: 415607

Jane Walker has set a 7% yield as the goal for the bond portion of her portfolio. To achieve this goal, she has purchased a 7%, 15-year corporate bond at a discount price of 93.50. What amount of reinvestment income will she need to earn over this 15-year period to achieve a compound return of 7% on a semiannual basis?

- A) \$574.
 - B) \$459.
 - C) \$624.
-

Question #2 of 92

Question ID: 415666

A bond has a convexity of 51.44. What is the approximate percentage price change of the bond due to convexity if rates rise by 150 basis points?

- A) 0.71%.
 - B) 0.58%.
 - C) 0.26%.
-

Question #3 of 92

Question ID: 485811

Which of the following is *least likely* an advantage of estimating the duration of a bond portfolio as a weighted average of the durations of the bonds in the portfolio?

- A) It can be used when the portfolio contains bonds with embedded options.
 - B) It is easier to calculate than the alternative.
 - C) It is theoretically more sound than the alternative.
-

Question #4 of 92

Question ID: 415662

If a Treasury bond has an annual modified duration of 10.27 and an annual convexity of 143, which of the following is *closest* to the estimated percentage price change in the bond for a 125 basis point increase in interest rates?

- A) -11.72%.
 - B) -9.33%.
 - C) -13.96%.
-

Question #5 of 92

Question ID: 415654

Jayce Arnold, a CFA candidate, considers a \$1,000 face value, option-free bond issued at par. Which of the following statements about the bond's dollar price behavior is *most likely* accurate when yields rise and fall by 200 basis points, respectively? Price will:

- A) decrease by \$149, price will increase by \$124.
 - B) decrease by \$124, price will increase by \$149.
 - C) increase by \$149, price will decrease by \$124.
-

Question #6 of 92

Question ID: 485813

Price risk will dominate reinvestment risk when the investor's:

- A) investment horizon is less than the bond's tenor.
 - B) duration gap is negative.
 - C) duration gap is positive.
-

Question #7 of 92

Question ID: 415616

A non-callable bond with 4 years remaining maturity has an annual coupon of 12% and a \$1,000 par value. The current price of the bond is \$1,063.40. Given a parallel shift in the yield curve of 50 basis points, which of the following is *closest* to the effective duration of the bond?

- A) 3.27.
 - B) 3.11.
 - C) 2.94.
-

Question #8 of 92

Question ID: 434421

An annual-pay bond is priced at 101.50. If its yield to maturity decreases 100 basis points, its price will increase to 105.90. If its yield to maturity increases 100 basis points, its price will decrease to 97.30. The bond's approximate modified convexity is *closest to*:

- A) 19.7.
 - B) 4.2.
 - C) 0.2.
-

Question #9 of 92

Question ID: 415628

Which of the following bonds has the shortest duration? A bond with a:

- A) 20-year maturity, 6% coupon rate.
 - B) 10-year maturity, 10% coupon rate.
 - C) 10-year maturity, 6% coupon rate.
-

Question #10 of 92

Question ID: 415641

The price value of a basis point (PVBP) for a 18 year, 8% annual pay bond with a par value of \$1,000 and yield of 9% is *closest* to:

- A) \$0.44.
 - B) \$0.80.
 - C) \$0.82.
-

Question #11 of 92

Question ID: 498772

Sensitivity of a bond's price to a change in yield at a specific maturity is *least appropriately* estimated by using:

- A) partial duration.
 - B) key rate duration.
 - C) effective duration.
-

Question #12 of 92

Question ID: 472435

The price value of a basis point (PVBP) for a bond is most accurately described as:

- A) an estimate of the curvature of the price-yield relationship for a small change in yield.
 - B) the product of a bond's value and its duration.
 - C) the change in the price of the bond when its yield changes by 0.01%.
-

Question #13 of 92

Question ID: 415674

Gus Magnuson, CFA, uses duration and convexity to estimate the effects of yield changes on bond prices. If Magnuson wishes to estimate the effects of changes in spreads on bond prices, rather than changes in yields, he may appropriately use:

- A) duration, but not convexity.
 - B) both duration and convexity.
 - C) neither duration nor convexity.
-

Question #14 of 92

Question ID: 434420

A \$100,000 par value bond has a full price of \$99,300, a Macaulay duration of 6.5, and an annual modified duration of 6.1. The bond's money duration per \$100 par value is *closest to*:

- A) \$606.
 - B) \$645.
 - C) \$6.06.
-

Question #15 of 92

Question ID: 415647

Negative convexity is *most likely* to be observed in:

- A) zero coupon bonds.
 - B) callable bonds.
 - C) government bonds.
-

Question #16 of 92

Question ID: 415625

Which of the following five year bonds has the *highest* interest rate sensitivity?

- A) Zero-coupon bond.
 - B) Option-free 5% coupon bond.
 - C) Floating rate bond.
-

Question #17 of 92

Question ID: 415670

The term structure of yield volatility illustrates the relationship between yield volatility and:

- A) Macaulay duration.
 - B) time to maturity.
 - C) yield to maturity.
-

Question #18 of 92

Question ID: 415657

A \$1,000 par value bond has a modified duration of 5. If the market yield increases by 1% the bond's price will:

- A) decrease by \$50.
- B) increase by \$50.
- C) decrease by \$60.

Question #19 of 92

Question ID: 415651

How does the price-yield relationship for a callable bond compare to the same relationship for an option-free bond? The price-yield relationship is *best* described as exhibiting:

- A) negative convexity for the callable bond and positive convexity for an option-free bond.
- B) negative convexity at low yields for the callable bond and positive convexity for the option-free bond.
- C) the same convexity for both bond types.

Question #20 of 92

Question ID: 415671

Which measure of duration should be matched to the bondholder's investment horizon so that reinvestment risk and market price risk offset each other?

- A) Macaulay duration.
- B) Modified duration.
- C) Effective duration.

Question #21 of 92

Question ID: 415622

An investor gathered the following information on two U.S. corporate bonds:

- Bond J is callable with maturity of 5 years
- Bond J has a par value of \$10,000
- Bond M is option-free with a maturity of 5 years
- Bond M has a par value of \$1,000

For each bond, which duration calculation should be applied?

<u>Bond J</u>	<u>Bond M</u>
A) Modified Duration	Effective Duration only
B) Effective Duration	Modified Duration or Effective Duration
C) Effective Duration	Effective Duration only

Question #22 of 92

Question ID: 485810

Which of the following will be the greatest for a putable bond at relatively high yields?

- A) Modified duration of the bond ignoring the option.
 - B) Macaulay duration of the bond ignoring the option.
 - C) Effective duration of the bond.
-

Question #23 of 92

Question ID: 415623

Effective duration is more appropriate than modified duration as a measure of a bond's price sensitivity to yield changes when:

- A) the bond contains embedded options.
 - B) yield curve changes are not parallel.
 - C) the bond has a low coupon rate and a long maturity.
-

Question #24 of 92

Question ID: 472429

Tony Horn, CFA, is evaluating two bonds. The first bond, issued by Kano Corp., pays a 7.5% annual coupon and is priced to yield 7.0%. The second bond, issued by Samuel Corp., pays a 7.0% annual coupon and is priced to yield 8.0%. Both bonds mature in ten years. If Horn can reinvest the annual coupon payments from either bond at 7.5%, and holds both bonds to maturity, his return will be:

- A) greater than 7.0% on the Kano bonds and greater than 8.0% on the Samuel bonds.
 - B) less than 7.0% on the Kano bonds and less than 8.0% on the Samuel bonds.
 - C) greater than 7.0% on the Kano bonds and less than 8.0% on the Samuel bonds.
-

Question #25 of 92

Question ID: 434418

For large changes in yield, which of the following statements about using duration to estimate price changes is *most accurate*?
Duration alone:

- A) overestimates the increase in price for increases in yield.
 - B) overestimates the increase in price for decreases in yield.
 - C) underestimates the increase in price for decreases in yield.
-

Question #26 of 92

Question ID: 471004

A bond has a duration of 10.62 and a convexity of 182.92. For a 200 basis point increase in yield, what is the approximate percentage price change of the bond?

- A) -17.58%.

- B) -1.62%.
 - C) -24.90%.
-

Question #27 of 92

Question ID: 415634

When interest rates increase, the modified duration of a 30-year bond selling at a discount:

- A) increases.
 - B) decreases.
 - C) does not change.
-

Question #28 of 92

Question ID: 415663

An investor gathered the following information about an option-free U.S. corporate bond:

- Par Value of \$10 million
- Convexity of 90
- Duration of 7

If interest rates increase 2% (200 basis points), the bond's percentage price change is *closest* to:

- A) -12.2%.
 - B) -15.8%.
 - C) -14.0%.
-

Question #29 of 92

Question ID: 415635

What happens to bond durations when coupon rates increase and maturities increase?

<u>As coupon rates increase.</u>	<u>As maturities increase.</u>
<u>duration:</u>	<u>duration:</u>

- | | |
|--------------|-----------|
| A) increases | increases |
| B) decreases | decreases |
| C) decreases | increases |
-

Question #30 of 92

Question ID: 472430

Assuming the issuer does not default, can capital gains or losses be a component of the holding period return on a zero-coupon bond that is sold prior to maturity?

- A) Yes, because the purchase price is less than the bond's value at maturity.
 - B) No, because amortization of the discount is interest income.
 - C) Yes, because the bond's yield to maturity may have changed.
-

Question #31 of 92

Question ID: 415669

If the term structure of yield volatility slopes upward:

- A) long-term interest rates are more variable than short-term interest rates.
 - B) short-term interest rates are less than long-term interest rates.
 - C) forward interest rates are higher than spot interest rates.
-

Question #32 of 92

Question ID: 415621

When compared to modified duration, effective duration:

- A) factors in how embedded options will change expected cash flows.
 - B) places less weight on recent changes in the bond's ratings.
 - C) is equal to modified duration for callable bonds but not putable bonds.
-

Question #33 of 92

Question ID: 436854

Vantana Inc. has a bond outstanding with a modified duration of 5.3 and approximate convexity of 110. If yields increase by 1%, the bond price will:

- A) decrease by less than 5.3%.
 - B) decrease by more than 5.3%.
 - C) increase by more than 5.3%.
-

Question #34 of 92

Question ID: 415636

A bond portfolio consists of a AAA bond, a AA bond, and an A bond. The prices of the bonds are \$1,050, \$1,000, and \$950 respectively. The durations are 8, 6, and 4 respectively. What is the duration of the portfolio?

- A) 6.00.
- B) 6.07.
- C) 6.67.

Question #35 of 92

Question ID: 415619

A bond's yield to maturity decreases from 8% to 7% and its price increases by 6%, from \$675.00 to \$715.50. The bond's effective duration is *closest to*:

- A) 7.0.
 - B) 6.0.
 - C) 5.0.
-

Question #36 of 92

Question ID: 415645

A \$1,000 face, 10-year, 8.00% semi-annual coupon, option-free bond is issued at par (market rates are thus 8.00%). Given that the bond price decreased 10.03% when market rates increased 150 basis points (bp), if market yields decrease by 150 bp, the bond's price will:

- A) increase by more than 10.03%.
 - B) decrease by more than 10.03%.
 - C) increase by 10.03%.
-

Question #37 of 92

Question ID: 415665

Consider a bond with modified duration of 5.61 and convexity of 43.84. Which of the following is *closest* to the estimated percentage price change in the bond for a 75 basis point decrease in interest rates?

- A) 4.21%.
 - B) 4.33%.
 - C) 4.12%.
-

Question #38 of 92

Question ID: 434419

The appropriate measure of interest rate sensitivity for bonds with an embedded option is:

- A) Macaulay duration.
 - B) effective duration.
 - C) modified duration.
-

Question #39 of 92

Question ID: 415629

Suppose the term structure of interest rates makes an instantaneous parallel upward shift of 100 basis points. Which of the following securities experiences the *largest* change in value? A five-year:

- A) floating rate bond.
 - B) coupon bond with a coupon rate of 5%.
 - C) zero-coupon bond.
-

Question #40 of 92

Question ID: 415610

If the coupon payments are reinvested at the coupon rate during the life of a bond, then the yield to maturity:

- A) is less than the realized yield.
 - B) may be greater or less than the realized yield.
 - C) is greater than the realized yield.
-

Question #41 of 92

Question ID: 434416

If the yield to maturity on a bond decreases after purchase but before the first coupon date and the bond is held to maturity, reinvestment risk is:

- A) less than price risk and the realized yield will be higher than the YTM at purchase.
 - B) less than price risk and the realized yield will be lower than the YTM at purchase.
 - C) greater than price risk and the realized yield will be lower than the YTM at purchase.
-

Question #42 of 92

Question ID: 415675

Which of the following is *least likely* to increase a bond's yield spread to the benchmark yield curve?

- A) Credit rating downgrade.
 - B) Increase in expected inflation.
 - C) Decrease in liquidity.
-

Question #43 of 92

Question ID: 415606

When computing the yield to maturity, the implicit reinvestment assumption is that the interest payments are reinvested at the:

- A) prevailing yield to maturity at the time interest payments are received.
- B) yield to maturity at the time of the investment.
- C) coupon rate.

Question #44 of 92

Question ID: 415660

For a given bond, the duration is 8 and the convexity is 100. For a 60 basis point decrease in yield, what is the approximate percentage price change of the bond?

- A) 4.98%.
 - B) 4.62%.
 - C) 2.52%.
-

Question #45 of 92

Question ID: 485809

Sarah Metz buys a 10-year bond at a price below par. Three years later, she sells the bond. Her capital gain or loss is measured by comparing the price she received for the bond to its:

- A) carrying value.
 - B) original price less amortized discount.
 - C) original purchase price.
-

Question #46 of 92

Question ID: 415630

Holding other factors constant, the interest rate risk of a coupon bond is higher when the bond's:

- A) coupon rate is higher.
 - B) yield to maturity is lower.
 - C) current yield is higher.
-

Question #47 of 92

Question ID: 415608

An investor purchases a 4-year, 6%, semiannual-pay Treasury note for \$9,485. The security has a par value of \$10,000. To realize a total return equal to 7.515% (its yield to maturity), all payments must be reinvested at a return of:

- A) less than 7.515%.
 - B) 7.515%.
 - C) more than 7.515%.
-

Question #48 of 92

Question ID: 599003

A UK 12-year corporate bond with a 4.25% coupon is priced at £107.30. This bond's duration and convexity are 9.5 and 107.2. If the bond's yield decreases by 125 basis points, the estimated price of the bond is *closest to*:

- A) £120.95.
 - B) £112.72.
 - C) £121.84.
-

Question #49 of 92

Question ID: 415627

Which of the following statements about an embedded call feature in a bond is *least* accurate? The call feature:

- A) reduces the bond's capital appreciation potential.
 - B) exposes investors to additional reinvestment rate risk.
 - C) increases the bond's duration, increasing price risk.
-

Question #50 of 92

Question ID: 415658

A bond has the following characteristics:

- Maturity of 30 years
- Modified duration of 16.9 years
- Yield to maturity of 6.5%

If the yield to maturity *decreases* by 0.75%, what will be the percentage change in the bond's price?

- A) -12.675%.
 - B) 0.750%.
 - C) +12.675%.
-

Question #51 of 92

Question ID: 415653

For a given change in yields, the difference between the actual change in a bond's price and that predicted using duration alone will be greater for:

- A) a bond with greater convexity.
 - B) a bond with less convexity.
 - C) a short-term bond.
-

Question #52 of 92

Question ID: 460706

An analyst gathered the following information about a 15-year bond:

- 10% semiannual coupon.
- Modified duration of 7.6 years.

If the market yield rises 75 basis points, the bond's approximate price change is a:

- A)** 5.4% increase.
 - B)** 5.7% decrease.
 - C)** 5.4% decrease.
-

Question #53 of 92

Question ID: 415656

Given a bond with a modified duration of 1.93, if required yields increase by 50 basis points, the expected percentage price change would be:

- A)** -1.025%.
 - B)** -0.965%.
 - C)** 1.000%.
-

Question #54 of 92

Question ID: 496434

When using duration and convexity to estimate the effect on a bond's value of changes in its credit spread, an analyst should *most appropriately* use:

- A)** Macaulay duration rather than modified duration.
 - B)** a convexity measure that has been adjusted for the bond's credit risk.
 - C)** the same method used when estimating the effect of changes in yield.
-

Question #55 of 92

Question ID: 472433

Which of the following duration measures is *most appropriate* if an analyst expects a non-parallel shift in the yield curve?

- A)** Modified duration.
 - B)** Key rate duration.
 - C)** Effective duration.
-

Question #56 of 92

Question ID: 415632

Which of the following bonds is *most likely* to exhibit the *greatest* volatility due to interest rate changes? A bond with a:

- A)** high coupon and a long maturity.

- B) low coupon and a long maturity.
 - C) low coupon and a short maturity.
-

Question #57 of 92

Question ID: 415668

A bond's duration is 4.5 and its convexity is 87.2. If interest rates rise 100 basis points, the bond's percentage price change is *closest* to:

- A) -4.94%.
 - B) -4.06%.
 - C) -4.50%.
-

Question #58 of 92

Question ID: 415655

A non-callable bond has a modified duration of 7.26. Which of the following is the *closest* to the approximate price change of the bond with a 25 basis point increase in rates?

- A) -1.820%.
 - B) 1.820%.
 - C) -0.018%.
-

Question #59 of 92

Question ID: 415617

A 30-year semi-annual coupon bond issued today with market rates at 6.75% pays a 6.75% coupon. If the market yield declines by 30 basis points, the price increases to \$1,039.59. If the market yield rises by 30 basis points, the price decreases to \$962.77. Which of the following choices is *closest* to the approximate percentage change in price for a 100 basis point change in the market interest rate?

- A) 3.84%.
 - B) 1.28%.
 - C) 12.80%.
-

Question #60 of 92

Question ID: 415638

Donald McKay, CFA, is analyzing a client's fixed income portfolio. As of the end of the last quarter, the portfolio had a market value of \$7,545,000 and a portfolio duration of 6.24. McKay is predicting that the yield for all of the securities in the portfolio will decline by 25 basis points next quarter. If McKay's prediction is accurate, the market value of the portfolio:

- A) will increase by approximately 6.24%.
- B) at the end of the next quarter will be approximately \$7,427,300.

C) will increase by approximately \$117,700.

Question #61 of 92

Question ID: 472432

Key rate duration is *best* described as a measure of price sensitivity to a:

- A) change in a bond's cash flows.
 - B) change in yield at a single maturity.
 - C) parallel shift in the benchmark yield curve.
-

Question #62 of 92

Question ID: 415672

An investor buys a bond that has a Macaulay duration of 3.0 and a yield to maturity of 4.5%. The investor plans to sell the bond after three years. If the yield curve has a parallel downward shift of 100 basis points immediately after the investor buys the bond, her annualized horizon return is *most likely* to be:

- A) approximately 4.5%.
 - B) greater than 4.5%.
 - C) less than 4.5%.
-

Question #63 of 92

Question ID: 415611

Assume that the current price of an annual-pay bond is 102.50. If its YTM increases by 0.5% the value of the bond decreases to 100 and if its YTM decreases by 0.5% the price of the bond increases to 105.5. What is the approximate modified duration of the bond?

- A) 5.48.
 - B) 5.37.
 - C) 5.50.
-

Question #64 of 92

Question ID: 415624

Which of the following statements concerning the price volatility of bonds is *most* accurate?

- A) Bonds with higher coupons have lower interest rate risk.
 - B) As the yield on callable bonds approaches the coupon rate, the bond's price will approach a "floor" value.
 - C) Bonds with longer maturities have lower interest rate risk.
-

Question #65 of 92

Question ID: 415620

A non-callable bond with 10 years remaining maturity has an annual coupon of 5.5% and a \$1,000 par value. The yield to maturity on the bond is 4.7%. Which of the following is *closest* to the estimated price change of the bond using duration if rates rise by 75 basis points?

- A) -\$47.34.
 - B) -\$61.10.
 - C) -\$5.68.
-

Question #66 of 92

Question ID: 415618

A bond with a yield to maturity of 8.0% is priced at 96.00. If its yield increases to 8.3% its price will decrease to 94.06. If its yield decreases to 7.7% its price will increase to 98.47. The modified duration of the bond is *closest to*:

- A) 4.34.
 - B) 7.66.
 - C) 2.75.
-

Question #67 of 92

Question ID: 434424

An investor purchases a fixed coupon bond with a Macaulay duration of 5.3. The bond's yield to maturity decreases before the first coupon payment. If the YTM then remains constant and the investor sells the bond after three years, the realized yield will be:

- A) equal to the YTM at the date of purchase.
 - B) higher than the YTM at the date of purchase.
 - C) lower than the YTM at the date of purchase.
-

Question #68 of 92

Question ID: 415643

A bond is priced at 95.80. Using a pricing model, an analyst estimates that a 25 bp parallel upward shift in the yield curve would decrease the bond's price to 94.75, while a 25 bp parallel downward shift in the yield curve would increase its price to 96.75. The bond's effective convexity is *closest to*:

- A) -167.
 - B) 4.
 - C) 3,340.
-

Question #69 of 92

Question ID: 460705

Which of the following statements regarding the risks inherent in bonds is *most accurate*?

- A) Interest rate risk is the risk that the coupon rate will be adjusted downward if market rates decline.
 - B) Default risk deals with the likelihood that the issuer will fail to meet its obligations as specified in the indenture.
 - C) The reinvestment rate assumption in calculating bond yields is generally not significant to the bond's yield.
-

Question #70 of 92

Question ID: 415637

Which of the following is a limitation of the portfolio duration measure? Portfolio duration only considers:

- A) a nonparallel shift in the yield curve.
 - B) the market values of the bonds.
 - C) a linear approximation of the actual price-yield function for the portfolio.
-

Question #71 of 92

Question ID: 472434

An analyst has stated that, holding all else constant, an increase in the maturity of a coupon bond will increase its interest rate risk, and that a decrease in the coupon rate of a coupon bond will decrease its interest rate risk. The analyst is correct with respect to:

- A) both of these effects.
 - B) neither of these effects.
 - C) only one of these effects.
-

Question #72 of 92

Question ID: 434422

The price of a bond is equal to \$101.76 if the term structure of interest rates is flat at 5%. The following bond prices are given for up and down shifts of the term structure of interest rates. Using the following information what is the approximate percentage price change of the bond using effective duration and assuming interest rates decrease by 0.5%?

- Bond price: \$98.46 if term structure of interest rates is flat at 6%
- Bond price: \$105.56 if term structure of interest rates is flat at 4%

- A) 0.174%.
 - B) 1.74%.
 - C) 0.0087%.
-

Question #73 of 92

Question ID: 415664

Assume that a straight bond has a duration of 1.89 and a convexity of 32. If interest rates decline by 1% what is the total estimated percentage price change of the bond?

- A) 1.56%.
 - B) 2.05%.
 - C) 1.89%.
-

Question #74 of 92

Question ID: 415646

Which of the following statements *best* describes the concept of negative convexity in bond prices? As interest rates:

- A) rise, the bond's price decreases at a decreasing rate.
 - B) fall, the bond's price increases at an increasing rate.
 - C) fall, the bond's price increases at a decreasing rate.
-

Question #75 of 92

Question ID: 415639

Which of the following is *most likely* to be the money duration of newly issued 360-day eurocommercial paper?

- A) 360 days.
 - B) □25 million.
 - C) 4.3%.
-

Question #76 of 92

Question ID: 415633

An international bond investor has gathered the following information on a 10-year, annual-pay U.S. corporate bond:

- Currently trading at par value
- Annual coupon of 10%
- Estimated price if rates increase 50 basis points is 96.99%
- Estimated price if rates decrease 50 basis points is 103.14%

The bond's modified duration is *closest* to:

- A) 3.14.
 - B) 6.58.
 - C) 6.15.
-

Question #77 of 92

Question ID: 472431

Consider a 25-year, \$1,000 par semiannual-pay bond with a 7.5% coupon and a 9.25% YTM. Based on a yield change of 50 basis points, the approximate modified duration of the bond is *closest to*:

- A) 10.03.
 - B) 12.50.
 - C) 8.73.
-

Question #78 of 92

Question ID: 415613

A noncallable bond with seven years remaining to maturity is trading at 108.1% of a par value of \$1,000 and has an 8.5% coupon. If interest rates rise 50 basis points, the bond's price will fall to 105.3% and if rates fall 50 basis points, the bond's price will rise to 111.0%. Which of the following is *closest* to the effective duration of the bond?

- A) 6.12.
 - B) 5.27.
 - C) 5.54.
-

Question #79 of 92

Question ID: 485812

Negative effective convexity will *most likely* be exhibited by a:

- A) puttable bond at high yields.
 - B) callable bond at low yields.
 - C) callable bond at high yields.
-

Question #80 of 92

Question ID: 415667

A bond has a modified duration of 7 and convexity of 100. If interest rates decrease by 1%, the price of the bond will *most likely*:

- A) increase by 6.5%.
 - B) increase by 7.5%.
 - C) decrease by 7.5%.
-

Question #81 of 92

Question ID: 415612

The price of a bond is equal to \$101.76 if the term structure of interest rates is flat at 5%. The following bond prices are given for up and down shifts of the term structure of interest rates. Using the following information what is the effective duration of the bond?

Bond price: \$98.46 if term structure of interest rates is flat at 6%
Bond price: \$105.56 if term structure of interest rates is flat at 4%

- A) 3.49.
 - B) 1.56.
 - C) 1.74.
-

Question #82 of 92

Question ID: 415615

An investor finds that for a 1% increase in yield to maturity, a bond's price will decrease by 4.21% compared to a 4.45% increase in value for a 1% decline in YTM. If the bond is currently trading at par value, the bond's approximate modified duration is *closest* to:

- A) 4.33.
 - B) 43.30.
 - C) 8.66.
-

Question #83 of 92

Question ID: 415673

An investor who buys bonds that have a Macaulay duration less than his investment horizon:

- A) is minimizing reinvestment risk.
 - B) will benefit from decreasing interest rates.
 - C) has a negative duration gap.
-

Question #84 of 92

Question ID: 415640

The price value of a basis point (PVBP) for a 7-year, 10% semiannual pay bond with a par value of \$1,000 and yield of 6% is *closest* to:

- A) \$0.28.
 - B) \$0.92.
 - C) \$0.64.
-

Question #85 of 92

Question ID: 434417

Calculate the effective duration for a 7-year bond with the following characteristics:

- Current price of \$660

- A price of \$639 when the yield curve shifts up 50 basis points
- A price of \$684 when the yield curve shifts down by 50 basis points

- A) 6.5.
 - B) 6.8.
 - C) 3.1.
-

Question #86 of 92

Question ID: 498773

Duration and convexity are *most likely* to produce more accurate estimates of interest rate risk when the term structure of yield volatility is:

- A) flat.
 - B) upward sloping.
 - C) downward sloping.
-

Question #87 of 92

Question ID: 415631

In comparing the price volatility of puttable bonds to that of option-free bonds, a puttable bond will have:

- A) less price volatility at low yields.
 - B) more price volatility at higher yields.
 - C) less price volatility at higher yields.
-

Question #88 of 92

Question ID: 599002

A 9-year corporate bond with a 3.25% coupon is priced at □103.96. This bond's duration and convexity are 7.8 and 69.8. If the bond's yield increases by 100 basis points, the impact on the bondholder's return is *closest to*:

- A) +8.15%.
 - B) -7.45%.
 - C) -7.80%.
-

Question #89 of 92

Question ID: 415649

Which of the following is *most* accurate about a bond with positive convexity?

- A) Positive changes in yield lead to positive changes in price.
- B) Price increases and decreases at a faster rate than the change in yield.

- C) Price increases when yields drop are greater than price decreases when yields rise by the same amount.
-

Question #90 of 92

Question ID: 415626

Which of the following bonds has the *highest* interest rate sensitivity? A:

- A) ten year, option-free 4% coupon bond.
 - B) five year, 5% coupon bond callable in one year.
 - C) ten year, option-free 6% coupon bond.
-

Question #91 of 92

Question ID: 415648

Adjusting for convexity improves an estimated price change for a bond compared to using duration alone because:

- A) the slope of the callable bond price/yield curve is backward bending at high interest rates.
 - B) it measures the volatility of non-callable bonds.
 - C) the slope of the price/yield curve is not linear.
-

Question #92 of 92

Question ID: 415609

All else being equal, which of the following bond characteristics will lead to *lower* levels of coupon reinvestment risk for bonds that are held to maturity?

- A) Longer maturities and higher coupon levels.
- B) Shorter maturities and higher coupon levels.
- C) Shorter maturities and lower coupon levels.