




### Question #1 of 33

Question ID: 1458792

A restricted payment covenant in a high yield bond indenture protects lenders by:

- A) limiting the amount of cash paid to equity holders. 
- B) making a parent company's debt rank pari passu with a subsidiary's debt. 
- C) requiring the borrower to buy back its debt if the company is sold. 

#### Explanation

A restricted payment covenant protects lenders by limiting the amount of cash that may be paid to equity holders. *Restricted subsidiaries'* cash flows are used to service the debt of the parent or holding company and make a parent company's debt rank pari passu with the subsidiary's debt. A *change of control put* protects lenders by requiring the borrower to buy back its debt in the event of an acquisition.




(Module 47.2, LOS 47.j)

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### Question #2 of 33

Question ID: 1458770

One notable difference between an issuer credit rating and an issue credit rating is that an:

- A) issue credit rating applies to the issuer's senior unsecured debt. 
- B) issue credit rating is always notched below the issuer rating. 
- C) issuer credit rating reflects the borrower's overall creditworthiness. 

#### Explanation

An issuer credit rating reflects the borrower's overall creditworthiness. Senior unsecured debt is usually the basis for an issuer credit rating. Notching of issue ratings can be upward or downward relative to an issuer credit rating.




(Module 47.1, LOS 47.d)

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### Question #3 of 33

Question ID: 1458773

Bond investors should not rely exclusively on credit agency ratings because:

- A)** credit ratings may change over time. 
- B)** default rates are higher for lower-rated bonds. 
- C)** market pricing tends to lag changes in credit ratings. 

#### Explanation

Credit ratings are not stable over time and bonds may be upgraded or downgraded during their lives. Market pricing typically leads changes in credit ratings. Default rates should be higher for lower-rated bonds if credit ratings are accurate.




(Module 47.1, LOS 47.e)

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#### Question #4 of 33

Question ID: 1458774

Bond X and Bond Y have the same par value, coupon, maturity, and credit rating, but Bond X trades at a higher price than Bond Y. A possible reason for this difference is that:

- A)** Bond X is callable. 
- B)** the market expects a downgrade to Bond Y's credit rating. 
- C)** Bond Y is puttable. 

#### Explanation

The market price difference can be accounted for by a lag in the bonds' credit rating behind the market's assessment of their creditworthiness. The bond market may be expecting a downgrade of Bond Y or an upgrade of Bond X.

If Bond X were callable it would have been riskier and therefore trade at a lower price than Bond Y.

If Bond Y were puttable it would have been less risky and therefore trade at a higher price compared to Bond X.




(Module 47.1, LOS 47.e)

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#### Question #5 of 33

Question ID: 1458785

Which of the following is the most appropriate strategy for a fixed income portfolio manager under the anticipation of an economic expansion?

- A) Purchase corporate bonds and sell Treasury bonds. 
- B) Sell lower-rated corporate bonds and buy higher-rated corporate bonds. 
- C) Sell corporate bonds and purchase Treasury bonds. 

#### Explanation

During periods of economic expansion corporate yield spreads generally narrow, reflecting decreased credit risk. If yield spreads narrow, the prices of corporate bonds increase relative to the prices of Treasuries. Selling lower-rated bonds and buying higher-rated bonds is an appropriate strategy if an economic contraction is anticipated.


(Module 47.2, LOS 47.i)

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#### Question #6 of 33

Question ID: 1462952

For bonds of the same credit rating, compared to corporate bonds, the default rate for municipal bonds has historically been:

- A) higher. 
- B) the same. 
- C) lower. 

#### Explanation

For bonds with the same credit rating, default rates for municipal bonds have been lower than those of corporate bonds.




(Module 47.2, LOS 47.j)

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#### Question #7 of 33

Question ID: 1458790

Which of the following statements about municipal bonds is *least accurate*?

- A) A municipal bond guarantee is a form of insurance provided by a third party other than the issuer. 
- B) Bonds with municipal bond guarantees are more liquid in the secondary market and generally have lower required yields. 
- C) Revenue bonds have lower yields than general obligation bonds because they are backed by specific projects. 

#### Explanation

General obligation bonds are backed by the full faith, credit, and taxing power of the issuer and thus tend to have lower yields than revenue bonds.

(Module 47.2, LOS 47.j)

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### Question #8 of 33

Question ID: 1458768

Debt with a lower priority of claims than a firm's unsecured debt is *best* described as:

- A) subordinated. 
- B) second lien. 
- C) pari passu. 

#### Explanation

Subordinated debt has a lower priority of claims than unsecured debt. Second lien is a form of secured debt, which has a higher priority of claims than unsecured debt. "Pari passu" refers to the equal priority of claims for different debt issues in the same category.




(Module 47.1, LOS 47.c)

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### Question #9 of 33

Question ID: 1458794

Structural subordination is *most likely* to be a credit rating consideration for:

- A) emerging market sovereign bonds. 
- B) general obligation municipal bonds. 
- C) high-yield corporate bonds. 

#### Explanation

Structural subordination is a credit consideration for corporate debt that results when a subsidiary has outstanding debt with a higher priority claim to the subsidiary's cash flows than the parent company's debt.

(Module 47.2, LOS 47.j)

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### Question #10 of 33

Question ID: 1458776

Which component of traditional credit analysis includes evaluation of industry structure, industry fundamentals, and company fundamentals?

- A) Capacity.
- B) Collateral.
- C) Covenants.



#### Explanation

Analyzing a corporate borrower's capacity to repay its debt obligations is similar to the top-down process used in equity analysis. Collateral analysis is evaluating the issuer's assets. Analyzing covenants involves reviewing the terms and conditions of lending agreements.

(Module 47.1, LOS 47.f)

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### Question #11 of 33

Question ID: 1458766

Loss severity is *most accurately* defined as the:

- A) amount a bondholder will lose if the issuer defaults.
- B) percentage of a bond's value a bondholder will receive if the issuer defaults.
- C) probability that a bond issuer will default.



#### Explanation

Loss severity is the money amount or percentage of a bond's value a bondholder will lose if the issuer defaults. The percentage of a bond's value a bondholder will receive if the issuer defaults is the recovery rate.

(Module 47.1, LOS 47.b)

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### Question #12 of 33

Question ID: 1458786

If investors expect greater uncertainty in the bond markets, yield spreads between AAA and B rated bonds are *most likely* to:

- A) widen.
- B) slope downward.



C) narrow.



### Explanation

With greater uncertainty, investors require a higher return for taking on more risk. Therefore credit spreads will widen.

(Module 47.2, LOS 47.i)

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### Question #13 of 33

Question ID: 1458787

If a U.S. investor is forecasting that the yield spread between U.S. Treasury bonds and U.S. corporate bonds is going to widen, then which of the following is most likely to be CORRECT?

A) The economy is going to contract.



B) The economy is going to expand.



C) The U.S. dollar will weaken.



### Explanation

If economic conditions are expected to get worse, then the probability that corporations may default increases and causes credit spreads to widen.

(Module 47.2, LOS 47.i)

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### Question #14 of 33

Question ID: 1458779

The "four Cs" of credit analysis include:

A) capacity and character.



B) circumstances and covenants.



C) collateral and capital.



### Explanation

The "four Cs" of credit analysis are capacity, collateral, covenants, and character.

(Module 47.1, LOS 47.f)

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### Question #15 of 33

Question ID: 1458767

A non-callable bond with 18 years remaining maturity has an annual coupon of 7% and a \$1,000 par value. The current yield to maturity on the bond is 8%. Using a 50bp change in YTM, the approximate modified duration of the bond is:

A) 8.24.



B) 11.89.



C) 9.63.



#### Explanation

First, compute the current price of the bond as:

$$FV = \$1,000; PMT = \$70; N = 18; I/Y = 8\%; CPT \rightarrow PV = -\$906.28$$

Next, change the yield by plus-or-minus 50 basis points.

Compute the price of the bond if rates rise by 50 basis points to 8.5% as:

$$FV = \$1,000; PMT = \$70; N = 18; I/Y = 8.5\%; CPT \rightarrow PV = -\$864.17$$

Then compute the price of the bond if rates fall by 50 basis points to 7.5% as:

$$FV = \$1,000; PMT = \$70; N = 18; I/Y = 7.5\%; CPT \rightarrow PV = -\$951.47$$

The formula for approximate modified duration is:

$$(V_- - V_+) / (2V_0\Delta YTM)$$

Therefore, approximate modified duration is:

$$(\$951.47 - \$864.17) / (2 \times \$906.28 \times 0.005) = 9.63.$$

(Module 47.1, LOS 47.c)

### Question #16 of 33

Question ID: 1462951

The yield spreads between corporate bonds and government bonds are *most likely* to decrease if:

A) a credit rating downgrade on the corporate bonds becomes more likely.



B) liquidity decreases in the market for the corporate bonds.



C) investors increase their estimates of the recovery rate on the corporate bonds.



#### Explanation

Yield spreads reflect the credit quality of bond issuers and the liquidity of the market for their bonds. Narrowing (decreasing) yield spreads reflect improving credit quality or more liquidity. Widening (increasing) yield spreads reflect deteriorating credit quality or less liquidity. Increased estimates of the recovery rate in the event of default represent an improvement in investors' assessment of the issuer's credit quality and are likely to narrow yield spreads on the issuer's bonds.




(Module 47.1, LOS 47.a)

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### Question #17 of 33

Question ID: 1458771

Structural subordination means that a parent company's debt:

- A) has a higher priority of claims to a subsidiary's cash flows than the subsidiary's debt. 
- B) has a lower priority of claims to a subsidiary's cash flows than the subsidiary's debt. 
- C) ranks pari passu with a subsidiary's debt with respect to the subsidiary's cash flows. 

#### Explanation

Structural subordination means that cash flows from a subsidiary are used to pay the subsidiary's debt before they may be paid to the parent company to service its debt. As a result, parent company debt is effectively subordinate to the subsidiary's debt.




(Module 47.1, LOS 47.d)

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### Question #18 of 33

Question ID: 1458793

Compared to corporate bonds with the same credit ratings, municipal general obligation (GO) bonds typically have less credit risk because:

- A) default rates on GOs are typically lower for same credit ratings. 
- B) GOs are not affected by economic downturns. 
- C) governments can print money to repay debt. 

#### Explanation



Municipal bonds usually have lower default rates than corporate bonds of the same credit ratings. GO bonds' creditworthiness is affected by economic downturns. Sovereigns can print money to repay debt, but municipalities cannot.

(Module 47.2, LOS 47.j)

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### Question #19 of 33

Question ID: 1458791

Consider three municipal bonds issued by the Greater Holmen Metropolitan Capital Improvement District, a local authority that carries an issuer rating of single-A from the major debt rating agencies. All three bonds have the same coupon rate and maturity date.

- Series W was issued to finance the rebuilding and expansion of local schools and is backed by the District's authority to levy property tax.
- Series X was issued to build a water purification plant for the region. The District charges fees to the surrounding municipalities for their use of the plant. These fees are the only source of the interest and principal payments on the bonds.
- Series Y was issued to raise funds for the general use of the District in its ordinary maintenance projects and is backed by the District's authority to levy property tax. These bonds carry a third party guarantee of principal and interest payments.

What is *most likely* the order of the market yields on these three bond issues, from highest to lowest?

- A) Series X, Series W, Series Y.
- B) Series X, Series Y, Series W.
- C) Series Y, Series W, Series X.



#### Explanation

Series X is a revenue bond. Because they pay interest and principal only if revenues from the project they finance are sufficient, revenue bonds are typically riskier and therefore have higher market yields than general obligation bonds. Series Y is an insured bond. Municipal bond insurance typically results in a higher rating, and therefore a lower market yield, than an equivalent bond from the same municipal issuer. So of these three bonds, Series X should have the highest market yield and Series Y the lowest.

(Module 47.2, LOS 47.j)

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### Question #20 of 33

Question ID: 1458780

An increase in net income is *most likely* to decrease a borrower's:

- A) debt-to-EBITDA ratio.
- B) FFO-to-debt ratio.
- C) operating margin.



#### Explanation

An increase in net income is likely a result from increases in earnings before interest, taxes, depreciation and amortization (EBITDA) and operating income. An increase in net income is also likely to result in an increase in funds from operations (FFO). The only ratio listed that has earnings or operating cash flow in the denominator is the debt-to-EBITDA ratio. As the denominator increases, the ratio will decrease.

(Module 47.2, LOS 47.g)

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### Question #21 of 33

Question ID: 1458777

Analysis of a firm's intellectual capital, equity market capitalization, depreciation, and intangible assets is associated with which aspect of credit analysis?

- A) Capacity.
- B) Collateral.
- C) Covenants.



#### Explanation

These items are part of analyzing a borrower's collateral. Analyzing depreciation expense and equity market capitalization can provide insight into the quality of a firm's fixed assets. Intellectual capital and intangible assets can potentially be used as collateral if they can be separated from the firm and sold. Capacity refers to a borrower's ability to repay its obligations. Analysis of capacity focuses on industry structure and company fundamentals. Covenants are terms and conditions of a bond issue.

(Module 47.1, LOS 47.f)

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### Question #22 of 33

Question ID: 1458778

Fraud and malfeasance, soundness of strategy, and prior treatment of bondholders are criteria to evaluate a borrower's:

**A)** capacity.



**B)** covenants.



**C)** character.



#### Explanation

*Character* refers to the quality of management. Character analysis includes soundness of strategy, management's track record, accounting policies and tax strategies, fraud and malfeasance record, and prior treatment of bondholders.

*Capacity* refers to the ability of the borrower to make its debt payments on time.

*Covenants* are the terms and conditions of lending agreements with which the issuer must comply.

(Module 47.1, LOS 47.f)

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### Question #23 of 33

Question ID: 1458781

Jequa is a Japanese company with the following selected financial information:

	¥ billions
Net income from continuing operations	503
Depreciation & amortization	256
Capital expenditures	140
Cash flow from operations	361
Dividends	72

Jequa's funds from operations (FFO) is *closest to*:

**A)** ¥149 billion.



**B)** ¥759 billion.



**C)** ¥247 billion.



#### Explanation

FFO is defined as net income from continuing operations plus depreciation, amortization, deferred taxes, and other noncash items.

$$\text{FFO} = ¥503 + ¥256 = ¥759 \text{ billion.}$$

(Module 47.2, LOS 47.g)

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### Question #24 of 33

Question ID: 1458763

The risk of receiving less than market value when selling a bond is referred to as:

**A)** market liquidity risk.



**B)** loss severity risk.



**C)** recovery rate risk.



#### Explanation

Market liquidity risk is the risk of receiving less than market value when selling a bond and is reflected in the size of the bid-ask spreads. Market liquidity risk is greater for the bonds of less creditworthy issuers and for the bonds of smaller issuers with relatively little publicly traded debt. Loss severity and recovery rate refer to defaults.

(Module 47.1, LOS 47.a)

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### Question #25 of 33

Question ID: 1458772

A firm with a corporate family rating (CFR) of A3/A- issues secured bonds. Covenants to these bonds include a limitation on liens and a change of control put. If credit rating agencies notch this issue, its credit rating is *most likely* to be:

**A)** Baa1/BBB+.



**B)** A2/A.



**C)** Baa2/BBB.



#### Explanation

Both the priority of claims and the covenants suggest this issue has less credit risk than the issuer and therefore its issue credit rating may be notched upward. The issuer's credit rating (corporate family rating) is based on its senior unsecured debt. This issue is a secured bond, and therefore has a higher seniority ranking. A change of control put protects lenders by requiring the borrower to buy back its debt in the event of an acquisition. A limitation on liens limits the amount of secured debt that a borrower can carry. Both covenants reduce the credit risk of the issue.

(Module 47.1, LOS 47.d)

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### Question #26 of 33

Question ID: 1458784

Steven Company has EBITDA/interest and debt-to-capital ratios that are both higher compared to Joseph Company to a degree consistent with one level of issuer credit rating. Based only on this information, the credit rating of Steven is *most likely* to be:

- A) higher than Joseph.
- B) lower than Joseph.
- C) the same as Joseph.



#### Explanation

Steven's higher EBITDA/interest ratio is consistent with a higher credit rating than Joseph but its higher debt-to-capital ratio is consistent with a lower credit rating. Steven is most likely to have the same credit rating as Joseph.

(Module 47.2, LOS 47.h)

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### Question #27 of 33

Question ID: 1458789

Yield spreads tend to widen when equity market performance is:

- A) strong.
- B) weak.
- C) stable.



#### Explanation

Conditions that cause equity markets to weaken, such as poor economic growth, also tend to widen yield spreads in the bond market. Likewise, strong equity market performance tends to coincide with narrowing yield spreads. Yield spreads tend to narrow when equity markets are stable because investors "reaching for yield" increase their demand for bonds.




(Module 47.2, LOS 47.i)

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### Question #28 of 33

Question ID: 1458775

Which of the following *best* describes risks in relying on credit agency ratings?

- A) Changes in credit ratings tend to cause market prices to change. 
- B) Event risk is difficult for rating agencies to assess. 
- C) Credit ratings are assigned only at issuance. 

#### Explanation

Risks specific to a company or industry such as litigation, natural disasters, and corporate events are difficult to predict and incorporate into credit ratings. Changes in market prices tend to lead credit rating changes. Credit ratings can be revised after issuance.




(Module 47.1, LOS 47.e)

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### Question #29 of 33

Question ID: 1458764

The factors that must be considered when estimating the credit risk of a bond include:

- A) only the bond rating and the recovery rate. 
- B) only the bond rating. 
- C) the bond rating, the recovery rate, and the yield volatility. 

#### Explanation

Credit risk is calculated with the probability of default (estimated from the bond rating) and the estimated recovery value should the bond default. Yield volatility is combined with duration to estimate the *price risk* of a bond.

(Module 47.1, LOS 47.a)

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### Question #30 of 33

Question ID: 1458783

When calculating credit ratios, an analyst should increase a company's reported total debt if the company has:

- A) a debt guarantee from a parent or third party.
- B) a net pension asset on its balance sheet.
- C) operating lease obligations.



#### Explanation

Credit analysts should add to a company's total debt its obligations such as operating lease payments and underfunded pension plans. A net pension asset results from an overfunded pension plan. A credit analyst should include a debt guarantee in the total obligations of the company that is making the guarantee.

(Module 47.2, LOS 47.h)

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### Question #31 of 33

Question ID: 1458769

Which of the following bonds from the same corporate issuer has the lowest priority of claims?

- A) Collateral trust bond.
- B) Equipment trust certificate.
- C) Senior unsecured debenture.



#### Explanation

Secured bonds have a higher priority of claims than unsecured bonds. Collateral trust bonds and equipment trust certificates are secured bonds.




(Module 47.1, LOS 47.c)

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### Question #32 of 33

Question ID: 1458788

What is the *most likely* effect on yield spreads when demand for bonds is high and supply of bonds is low?

- The effect on yield spreads will depend on whether supply or demand is the stronger influence.
- A) 
- B) Yield spreads are likely to narrow. 
- C) Yield spreads are likely to widen. 

#### Explanation

Credit spreads tend to narrow in times of high demand for bonds and widen in times of low demand for bonds. Credit spreads tend to widen under excess supply conditions, such as large issuance in a short period of time, and narrow when supply is low.

(Module 47.2, LOS 47.i)


#### Question #33 of 33

Question ID: 1458782

Becque Ltd. is a European Union company with the following selected financial information:

€ billions	Year 1	Year 2	Year 3
Operating income	262	361	503
Depreciation & amortization	201	212	256
Capital expenditures	78	97	140
Cash flow from operations	303	466	361
Total debt	2,590	2,717	2,650
Dividends	70	70	72

Becque's three-year average debt-to-EBITDA ratio is *closest to*:

- A) 3.6x. 
- B) 4.6x. 
- C) 7.6x. 

#### Explanation



EBITDA = Operating income + depreciation + amortization

Year 1:  $262 + 201 = €463$  billion

Year 2:  $361 + 212 = €573$  billion

Year 3:  $503 + 256 = €759$  billion

Debt/EBITDA ratio:

Year 1:  $2,590 / 463 = 5.6x$

Year 2:  $2,717 / 573 = 4.7x$

Year 3:  $2,650 / 759 = 3.5x$

Three-year average = 4.6x.

(Module 47.2, LOS 47.g)