

Question #1 of 38

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

A) recovery rate risk.



B) market liquidity risk.



C) loss severity 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.

(Study Session 17, Module 55.1, LOS 55.a)

Question #2 of 38

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) ¥247 billion.



B) ¥149 billion.



C) ¥759 billion.



Explanation

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

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

(Study Session 17, Module 55.2, LOS 55.g)

Question #3 of 38

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) the same as Joseph.



C) lower than 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.

(Study Session 17, Module 55.2, LOS 55.h)

Question #4 of 38

The type of credit risk that is defined as the possibility that a borrower will fail to pay interest or repay principal when due is:

A) credit spread risk.



B) default risk.



C) downgrade risk.



Explanation

Default risk refers to the failure of a borrower to make timely and complete payments of interest or principal.

(Study Session 17, Module 55.1, LOS 55.a)

Question #5 of 38

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

A) governments can print money to repay debt.



B) GOs are not affected by economic downturns.



C) default rates on GOs are typically lower for same credit ratings.



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.

(Study Session 17, Module 55.2, LOS 55.j)

Question #6 of 38

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

A) Collateral trust bond.



B) Senior unsecured debenture.



C) Equipment trust certificate.



Explanation

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

(Study Session 17, Module 55.1, LOS 55.c)

Question #7 of 38

Support for revenue bonds comes from:

A) the full faith and credit of the issuing municipality.



B) income generated by the underlying project.



C) property taxes based on the project.



Explanation

Revenue bonds are serviced by the income generated from specific projects (e.g., toll roads).

(Study Session 17, Module 55.2, LOS 55.j)

Question #8 of 38

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.

(Study Session 17, Module 55.1, LOS 55.c)

Question #9 of 38

Which of the following is the reason why credit spreads between high quality bonds and low quality bonds widen during poor economic conditions?

A) interest risk.



B) default risk.



C) indenture provisions.



Explanation

During poor economic conditions the probability of default increases and thus credit spreads widen.

(Study Session 17, Module 55.2, LOS 55.i)

Question #10 of 38

Recovery rates are greatest for classes of debt with the highest:

A) loss severity.



B) default rates.



C) priority of claims.



Explanation

High default rates and loss severity are indicators of potential lower recovery rates. The highest priority of claims has the lowest credit risk.

(Study Session 17, Module 55.1, LOS 55.c)

Question #11 of 38

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

A) Capacity.



B) Covenants.



C) Collateral.



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.

(Study Session 17, Module 55.1, LOS 55.f)

Question #12 of 38

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

A) general obligation municipal bonds.



B) high-yield corporate bonds.



C) emerging market sovereign 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.

(Study Session 17, Module 55.2, LOS 55.j)

Question #13 of 38

In a sovereign debt credit rating, a country's foreign reserves, its external debt, and the status of its currency in foreign exchange markets are key factors for evaluating the country's:

A) monetary flexibility.



B) international investment position.



C) fiscal flexibility.



Explanation

The five key areas for evaluating and assigning a credit rating for sovereign bonds are institutional effectiveness, economic prospects, international investment position, fiscal flexibility, and monetary flexibility. International investment position includes analysis of the country's foreign reserves, its external debt, and the status of its currency.

(Study Session 17, Module 55.2, LOS 55.j)

Question #14 of 38

The "four Cs" of credit analysis include:

A) circumstances and covenants.



B) collateral and capital.



C) capacity and character.



Explanation

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

(Study Session 17, Module 55.1, LOS 55.f)

Question #15 of 38

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.

(Study Session 17, Module 55.2, LOS 55.i)

Question #16 of 38

Senior subordinated bonds have a priority of claims over:

A) first lien debt.



B) subordinated bonds.



C) secured bonds.



Explanation

First lien loans and secure bonds are senior to any unsecured debt. Senior subordinated debt is senior to subordinated debt.

(Study Session 17, Module 55.1, LOS 55.c)

Question #17 of 38

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

A) the bond rating, the recovery rate, and the yield volatility.



B) only the bond rating.



C) only the bond rating and the recovery rate.



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.

(Study Session 17, Module 55.1, LOS 55.a)

Question #18 of 38

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

A) Credit ratings are assigned only at issuance.



B) Event risk is difficult for rating agencies to assess.



C) Credit ratings tend to lead market prices.






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. Market prices tend to lead credit ratings. Credit ratings can be revised after issuance.

(Study Session 17, Module 55.1, LOS 55.e)

Question #19 of 38

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

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

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.

(Study Session 17, Module 55.2, LOS 55.h)

Question #20 of 38

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

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

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.

(Study Session 17, Module 55.1, LOS 55.f)

Question #21 of 38

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) 9.63. 
- B) 8.24. 
- C) 11.89. 

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:

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

(Study Session 17, Module 55.1, LOS 55.c)

Question #22 of 38

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.

(Study Session 17, Module 55.2, LOS 55.g)

Question #23 of 38

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

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



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.

(Study Session 17, Module 55.2, LOS 55.j)

Question #24 of 38

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) Baa2/BBB.



B) Baa1/BBB+.



C) A2/A.



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.

(Study Session 17, Module 55.1, LOS 55.d)

Question #25 of 38

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.

(Study Session 17, Module 55.1, LOS 55.d)

Question #26 of 38

Expected loss is greatest for a corporate bond with a low:

A) recovery rate and a low probability of default.



B) recovery rate and a high probability of default.



C) loss severity and a high probability of default.



Explanation

The combination of low recovery rate (high loss severity) and high probability of default will lead to greatest expected loss.

(Study Session 17, Module 55.1, LOS 55.a)

Question #27 of 38

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

(Study Session 17, Module 55.2, LOS 55.j)

Question #28 of 38

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

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



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.

(Study Session 17, Module 55.2, LOS 55.j)

Question #29 of 38

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

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

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.

(Study Session 17, Module 55.2, LOS 55.i)

Question #30 of 38

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

- A) covenants. ✗
- B) character. ✓
- C) capacity. ✗

Explanation

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

(Study Session 17, Module 55.1, LOS 55.f)

Question #31 of 38

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

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

(Study Session 17, Module 55.2, LOS 55.i)

Question #32 of 38

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 has a higher expected loss in a default. 
- B) the market expects a downgrade to Bond Y's credit rating. 
- C) Bond Y has a higher expected recovery rate in a default. 




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. Bond X would have a lower price than Bond Y if it had a higher expected loss. Bond Y would have a higher price than Bond X if it had a higher expected recovery rate.

(Study Session 17, Module 55.1, LOS 55.e)

Question #33 of 38

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.

(Study Session 17, Module 55.1, LOS 55.e)

Question #34 of 38

Loss severity is *most accurately* defined as the:

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

(Study Session 17, Module 55.1, LOS 55.b)

Question #35 of 38

Structural subordination means that a parent company's debt:

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

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.




(Study Session 17, Module 55.1, LOS 55.d)

Question #36 of 38

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

€ billions	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>
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) 7.6x. 
- C) 4.6x. 

Explanation

EBITDA = Operating income + depreciation + amortization

Year 1: $262 + 201 = \text{€}463$ billion

Year 2: $361 + 212 = \text{€}573$ billion

Year 3: $503 + 256 = \text{€}759$ 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 = $4.6x$.

(Study Session 17, Module 55.2, LOS 55.g)

Question #37 of 38

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.

(Study Session 17, Module 55.2, LOS 55.i)

Question #38 of 38

Yield spreads tend to widen when equity market performance is:

A) strong.



B) stable.



C) weak.



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.

(Study Session 17, Module 55.2, LOS 55.i)