Question #1 of 54

The relevant measure of cash flows for the limited partners (LPs), and the LPs' realized return from investment in the private equity fund, respectively, is:

	Return metric	LPs' realized return	
A)	Paid-in capital	Net IRR	✗
B)	Gross IRR	Residual value to paid-in	✗
C)	Net IRR	Distributed to paid-in capital	✓

Explanation

Net IRR measures the cash flows between the fund and the limited partners and is therefore the relevant return metric for the LPs. Distributed to paid-in capital (DPI) measures the LPs' realized return from investment in the fund. It is calculated as the cumulative distributions already paid to the LPs over the cumulative invested capital.

Gross IRR measures the cash flows between the fund and the portfolio companies. Residual value to paid-in capital (RVPI) measures the LPs' unrealized return from the fund. Paid-in capital measures the percent of capital used by the general partner.

(Study Session 15, Module 44.2, LOS 44.h)

Related Material

SchweserNotes - Book 5

Question #2 of 54

Which of the following pairs *correctly* identifies the fees paid to agents for raising funds for the private equity firm, and the fees paid to the general partner (GP) for investment banking services, respectively?

	Fees to agents	Fees to GP	
A)	Placement fees	Transaction fees	✓

B) Administrative costs — Placement fees

C) Transaction fees — Administrative costs

Explanation

Placement fees are upfront fees paid to agents for raising funds for the private equity firm. These fees typically are in the 2% range or paid as trailers.

Transaction fees are paid to the GP for investment banking services in the event of a merger or acquisition. Transaction fees are usually split with the limited partners and deducted from management fees.

Administrative costs are various annual costs including custodian fees, fees to transfer agents and accounting costs.

(Study Session 15, Module 44.3, LOS 44.i)

Related Material

SchweserNotes - Book 5

Question #3 of 54

Norah Cyly is the recently appointed manager of a private equity fund that invests exclusively in venture capital investments in online fashion and media advertising companies. In a discussion with the fund's assistant portfolio manager, Cyly makes the following statements on control mechanisms and exit routes:

Statement 1: *Earn-outs* are mainly used in venture capital investments. They relate the acquisition price paid by the limited partners to the future performance of the portfolio companies.

Statement 2: It is generally difficult to value venture capital investments using the portfolio companies' cash flows or EBIT or EBITDA growth, since both cash flows and earnings are difficult to predict with certainty.

With respect to her statements, Cyly is:

A) correct on both statements.

B) correct on Statement 2 only.

C) correct on Statement 1 only.

Explanation

Both of Cyly's statements are correct. Her description of earn-outs as a control mechanism is accurate. Her comment on cash flows and earnings growth is also correct, given most venture capital firms' lack of stable cash flow and earnings patterns. This type of valuation is better suited for leveraged buyout investments.

(Study Session 15, Module 44.1, LOS 44.b)

Related Material

SchweserNotes - Book 5

Question #4 of 54

Analysts Jordan Green and Noelle Lafonte are discussing terminal value estimation in venture capital and buyout investments.

Lafonte states: "Private equity firms often use scenario analysis in both venture capital and buyout investments to estimate terminal value."

Green adds: "Private equity firms only use the multiple of net income approach in leveraged buyout (LBO), but not in venture capital investments to estimate terminal value."

With respect to their statements:

A) Neither Lafonte nor Green is incorrect.

B) Green is correct but Lafonte is incorrect.

C) Lafonte is correct but Green is incorrect.

Explanation

Lafonte's statement is correct. Private equity firms can use scenario analysis to estimate terminal value in both venture capital and LBO investments. Under scenario analysis, terminal values are calculated under multiple scenarios using different assumptions.

Green's statement is incorrect. Private equity firms often use a relative value approach to estimate terminal value in both venture capital and LBO investments. Under the multiple of net income approach, terminal year net income is multiplied by the P/E ratio to project terminal equity value.

(Study Session 15, Module 44.1, LOS 44.c)

Related Material

SchweserNotes - Book 5

Question #5 of 54

A private equity firm is guaranteed to receive 80% of the residual value of a leveraged buyout investment, with the remaining 20% owing to management. The initial investment is $500 million, and the deal is financed with 70% debt and 30% equity. The projected multiple is 2.0. The equity component consists of:

- $120 million preference shares.
- $25 million private equity firm equity.
- $5 million management equity.

At exit in 5 years the value of debt is $150 million and the value of preference shares is $300 million. The payoff multiple for the private equity firm and for management, respectively, is *closest* to:

	Private equity	Management	
A)	3.03	11.0	✗
B)	6.34	46.0	✗
C)	5.10	22.0	✓

Explanation

The calculations at exit are as follows (all in million $):

- The exit value will be $500 × 2.0 (the specified multiple) = $1,000.
- Outstanding debt is $150.
- Preference shares are worth $300.
- Private equity firm's value: 80% of the residual exit value:

  (0.80)($1,000 − $150 − $300) = $440.
- Management's value: 20% of the residual exit value:

  (0.20)($1,000 − $150 − $300) = $110.

Total initial investment by the private equity firm is $145, and by management $5.

Total payoff to the private equity (PE) firm at exit is $440 + $300 = $740.

Payoff multiple for the PE firm is $740 / $145 = 5.10.

Total payoff to management at exit is $110.

Payoff multiple to management is $110 / $5 = 22.0.

(Study Session 15, Module 44.1, LOS 44.d)

Related Material

SchweserNotes - Book 5

Question #6 of 54

The Dragonhill Group manages a $250 million private equity fund. Investors committed to a total of $300 million over the term of the fund and specified carried interest of 20% and a hurdle rate of 10%. Carried interest is distributed on a deal-by-deal basis. 60% of the $250 million has been invested at the beginning of year 1 in Deutsch Co. (Deutsch), with the remaining 40% invested in Reiner Ltd (Reiner).

Both firms are sold at the end of the third year, realizing a $45 million profit for Deutsch and a $35 million profit for Reiner.

The carried interest paid to the fund's general partner after Deutsch and Reiner, respectively, is:

	Deutsch	Reiner	
A)	$0	$7 million	✓
B)	$9 million	$7 million	✗
C)	$9 million	$0	✗

Explanation

Since carried interest is paid on a deal-by-deal basis, profits are not netted. Also, carried interest is only paid if the investment's IRR at least meets the hurdle rate of 10%.

(All figures are in $ million):

The initial allocation between the firms was:

Deutsch: (0.60)($250) = $150

Reiner: (0.40)($250) = $100

The IRRs for the two firms are:

IRRDeutsch: PV = -$150; FV = $195, N = 3; CPT I/Y → IRR = 9.14%.

IRRReiner: PV = -$100; FV = $135; N = 3; CPT I/Y → IRR = 10.52%.

Since the return on Deutsch fell short of the 10% hurdle rate, the general partner only receives profits after Reiner. The profit is 20% of $35 million, or $7 million.

(Study Session 15, Module 44.2, LOS 44.f)

Related Material

SchweserNotes - Book 5

Question #7 of 54

The *least likely* factor affecting venture capital firm valuation is the:

A) private equity firm's initial investment. ✓

B) probability of failure. ✗

C) bargaining power of the venture capital and private equity firms.

Explanation

The probability of failure is often factored in to adjust the discount rate (IRR) which could significantly affect firm valuation. The bargaining power between the two parties affects the final price paid for the venture capital firm. The private equity firm's initial investment has no direct bearing on venture capital firm valuation.

(Study Session 15, Module 44.5, LOS 44.k)

Related Material

SchweserNotes - Book 5

Question #8 of 54

A private equity investor makes a $5 million investment in a venture capital firm today. The investor expects to sell the firm in four years. He believes there are three equally possible scenarios at termination:

1. expected earnings will be $20 million, and the expected P/E will be 10.
2. expected earnings will be $7 million, and the expected P/E will be 6.
3. expected earnings will be zero if the firm fails.

The investor believes an IRR of 25% is appropriate. The expected terminal value and the investor's pre-money valuation, respectively, are *closest* to (in $ million):

	Expected terminal value	Pre-money valuation
A)	$80.67	$28.04
B)	$9.00	$3.69
C)	$80.67	33.04

Explanation

The terminal value under each scenario is the expected earnings multiplied by the P/E ratio. The expected terminal value is the weighted average of the three scenarios (all in $ million):

Scenario 1: Terminal value = $20 × 10 = $200

Scenario 2: Terminal value = $7 × 6 = $42

Scenario 3: terminal value = $0

Expected terminal value = ($200 + $42 + $0) / 3 = $80.67

The expected terminal value is then discounted at the IRR rate to arrive at the post-money (POST) valuation:

$POST = FV / (1 + r)^N = \$80.67 / (1 + 0.25)^4 = \$33.04$

The pre-money (PRE) valuation is the post-money valuation less the investor's initial investment:

PRE = POST − INV = $33.04 − $5.0 = $28.04

(Study Session 15, Module 44.4, LOS 44.j)

Related Material

SchweserNotes - Book 5

Question #9 of 54

The private equity firm Purcell & Hyams (P&H) is considering a $17 million investment in Eizak Biotech, of which $10 million is invested today and $7 million in four years. Eizak's owners firmly believe that with P&H's investment they could develop their "wonder" drug and sell the firm in six years for $120 million. Given the project's risk, P&H believes a discount rate of 50% is appropriate for the first four years, and 30% for the last two years. The fractional ownership for P&H at the time of the initial investment would be *closest* to:

A) 0.27. ✗

B) 0.79. ✓

C) 0.71. ✗

Explanation

The calculation requires four steps *(all figures in millions except for fractional data)*:

Step 1: The terminal value must first be discounted to the time of the second-round financing to arrive at the post-money ($POST_2$) valuation:

$POST_2 = (\$120 \text{ million}) / (1.30)^2 = \$71.01 \text{ million}$

Step 2: The pre-money valuation (PRE_2) at the second round of financing is:

$PRE_2 = \$71.01 \text{ million} - \$7 \text{ million} = \$64.01 \text{ million}.$

Step 3: The PRE_2 valuation then has to be discounted back at the appropriate discount rate to the time of the first-round financing to arrive at the post-money ($POST_1$) valuation:

$POST_1 = (\$64.01 \text{ million}) / (1.50)^4 = \$12.64 \text{ million} =$

Step 4: The fractional ownership (f_1) for first-round investors is:

$f_1 = INV_1 / POST_1 = \$10 \text{ million} / \$12.64 \text{ million} = 0.79.$

(Study Session 15, Module 44.4, LOS 44.j)

Related Material

SchweserNotes - Book 5

Question #10 of 54

Which of the following statements is the *least appropriate*?

A) Debt amortization in a leveraged buyout investment increases risk to the investor as it is a burden on the firm's cash flow. ✓

B) Leverage in a leveraged buyout investment can be advantageous as debt amortization can magnify investor returns. ✗

C) Leverage in a leveraged buyout investment can be disadvantageous as debt increases risk to the investor if the firm cannot meet its interest obligation. ✗

Explanation

As the amortization of debt reduces investor risk (less debt outstanding) and the reduced claim by debtholders can actually magnify investor returns.

(Study Session 15, Module 44.1, LOS 44.d)

Related Material

SchweserNotes - Book 5

Question #11 of 54

An investor in a private equity fund realizes that the residual value to paid-in capital (RVPI) is fairly large relative to the distributed to paid-in capital (DPI). The *most* appropriate conclusion drawn by the investor would be that:

A) the fund successfully earned profits from its investments. ✗

B) there were significant cash flows from the fund to the investor. ✗

C) it will take longer for the investor to realize a return from the fund. ✓

Explanation

Paid-in capital measures the amount of capital drawn down out of total committed capital. Residual value to paid-in capital is the value of the investor's holding in the fund as a ratio of cumulative invested capital.

A high RVPI to DPI ratio indicates that the fund has not distributed a large portion of profits and may indicate difficulty realizing profits from its investments. In this case it would take longer for the investor to receive distributions from the fund (low cash flows to date).

(Study Session 15, Module 44.2, LOS 44.h)

Related Material

SchweserNotes - Book 5

Question #12 of 54

A private equity firm makes a $10 million investment in a portfolio company. The founders of a portfolio company currently hold 300,000 shares and the pre-money valuation is $6 million. The number of shares to be held by the private equity firm, and the appropriate share price, respectively, are *closest* to:

	Number of shares	Share price	
A)	500,000	$20.00	✓
B)	480,000	$20.83	✗
C)	500,000	$32.00	✗

Explanation

The answer requires four steps:

Step 1: Calculate the post-money (POST) valuation, which is simply the pre-money (PRE) valuation plus the investment:

POST = PRE + INV = $6 million + $10 million = $16 million

Step 2: Calculate the private equity firm's fractional ownership in the portfolio company:

f = INV / POST = $10 million / $16 million = 0.625

Step 3: If the founders currently hold 300,000 shares, the number of shares to be held by the private equity firm to have 62.5% ownership is:

Number of shares = 300,000 [0.625 / (1-0.625)] = 500,000

Step 4: Given the private equity firm's $10 million investment and 500,000 shares, the share price is calculated as:

P = $10 million / 500,000 = $20.00

(Study Session 15, Module 44.4, LOS 44.j)

Related Material

SchweserNotes - Book 5

Question #13 of 54

The founders of a small technology firm are seeking a $3 million venture capital investment from prospective investors. The founders project that their firm could be sold for $25 million in 4 years. The private equity investors deem a discount rate of 25% to be appropriate, but believe there is a 20% chance of failure in any year.

The adjusted pre-money valuation (PRE) of the technology firm is *closest* to (in millions):

A) $7.24. ✗

B) $1.19. ✓

C) $4.19. ✗

Explanation

The general formula for determining the pre-money value (PRE) is to first discount the exit (sale) value at the appropriate discount rate to its present value. This value is called the post-money value (POST). The pre-money value is the post-money value less the investment (INV):

$$POST = FV / (1+r)^N$$

$$PRE = POST - INV$$

This would yield a PRE value of $7.24 million when using the unadjusted discount rate of 25%. This rate, however, must be adjusted for the possibility of failure in any particular year. This is calculated as follows:

$r^* = (1 + r) / (1 - q) - 1$, where r is the unadjusted discount rate and q is the probability of failure.

The discount rate adjusted for failure is then:

$$r^* = (1 + 0.25) / (1 - 0.20) - 1 = 0.5625 \text{ or } 56.25\%$$

The pre value is then calculated as:

$$POST^* = \$25 / (1.5625)4 = \$4.19 \text{ million.}$$

$$PRE^* = \$4.19 - \$3.0 = \$1.19 \text{ million.}$$

(Study Session 15, Module 44.5, LOS 44.k)

Related Material

SchweserNotes - Book 5

Question #14 of 54

Which of the following statements *most accurately* describes the components of returns on a leveraged buyout (LBO) investment:

A) The return on common shares, the increase in the price multiple on exit, and the equity held by management.

B) The interest earned on debt financing, the return on common shares and the return on preference shares.

C) The return on preference shares, the increase in the price multiple on exit, and the reduction in debt claims.

Explanation

The components of a private equity firm's returns are the return on preference shares, the increased price multiple and the reduction in debt claims. The private equity firm should see an increase in the price multiples as the operational efficiencies of the LBO firm improve. The second component is the value of the interest-bearing preference shares. The third component is the reduction in debt over the time period to exit.

(Study Session 15, Module 44.1, LOS 44.d)

Related Material

SchweserNotes - Book 5

Question #15 of 54

A private equity investor calculates a discount rate of 40% for valuing a company. The investor, however, believes that there is a 20% chance that the company will fail in any one year. The *most appropriate* adjusted discount rate the investor should use is:

A) 75.0%. ✓

B) 48.0%. ✗

C) 50.0%. ✗

Explanation

The discount rate adjusted for the probability of failure is calculated as follows:

$$r^* = (1 + 0.40) / (1 - 0.20) - 1 = 0.75 \text{ or } 75\%$$

(Study Session 15, Module 44.5, LOS 44.k)

Related Material

SchweserNotes - Book 5

Question #16 of 54

The Nishan private equity fund was established five years ago and currently has a paid-in capital of $300 million and total committed capital of $500 million. The fund paid its first distribution three years ago of $50 million, $100 million the year after and $200 million last year. The fund's distributed to paid-in capital (DPI) multiple is *closest* to:

A) 0.70. ✗

B) 1.17. ✓

C) 0.67. ✗

Explanation

The DPI multiple is calculated as the cumulative distributions paid by the private equity fund divided by the paid-in capital (the portion of committed capital drawn down).

Nishan's current DPI is: ($50 + $100 + $200) / $300 = 1.17

(Study Session 15, Module 44.3, LOS 44.i)

Related Material

SchweserNotes - Book 5

Question #17 of 54

Which of the following terms correctly describes the risk to a private equity firm in long-term interest and exchange rates, and the provision that specifies the method of profit distribution between the limited partners (LPs) and general partner (GP), respectively?

	Risk in long-term rates	Profit distribution	
A)	Market risk	Distribution waterfall	✓
B)	Market risk	Carried interest	✗
C)	Capital risk	Carried interest	✗

Explanation

Market risk describes the risk of how changes in interest rate, exchange rate and other macroeconomic factors affect private equity investments.

The method of profit distribution between the LPs and GP is called distribution waterfall.

Carried interest is the GP's share of fund profits. Capital risk refers to the risk of capital depletion in a private equity fund and the risk of obtaining additional financing.

(Study Session 15, Module 44.2, LOS 44.g)

Related Material

SchweserNotes - Book 5

Question #18 of 54

An analyst is considering the performance of two private equity funds, Delta and Kappa.

Performance of private equity fund Delta and Kappa		
	Delta	**Kappa**
DPI	2.0	0.0
RVPI	0.0	2.0
TVPI	2.0	2.0

The *most appropriate* conclusion an analyst can draw from the table is that:

A) Kappa may be a younger fund than Delta. ✓

B) Kappa has distributed $2.0 for every dollar invested. ✗

C) Delta has yet to turn a profit. ✗

Explanation

Delta's distributed to paid-in capital (DPI) ratio of 2.0 indicates that investors in the fund realized a profit of $2.0 for every dollar invested and that this profit has already been paid out. Kappa's multiples indicate that the fund has yet to pay out profits to its investors. The residual value to paid-in capital (RVPI) of 2.0 implies that all returns are still unrealized and will be paid out in future years. One likely explanation for Kappa's multiples is that the fund is younger than Delta.

(Study Session 15, Module 44.2, LOS 44.h)

Related Material

SchweserNotes - Book 5

Question #19 of 54

The *most relevant* market risk to a private equity investor is:

A) short-term macro changes only. ✗

B) both short-term and long-term macro changes. ✗

C) long-term macro changes only. ✓

Explanation

Private equity investments are affected to a large degree by long-term macro- factors such as interest rate and exchange rate fluctuations and various market risks. Short-term macro-factors and short-term fluctuations are less relevant as the investor's time horizon typically exceeds 10 years.

(Study Session 15, Module 44.2, LOS 44.g)

Related Material

SchweserNotes - Book 5

Question #20 of 54

The Milat Private Equity Fund (Milat) makes a $35 million investment in a promising venture capital firm. Milat expects the venture capital firm could be sold in four years for $150 million and determines that the appropriate IRR rate is 40%. The founders of the venture capital firm currently hold 1 million shares. Milat's fractional ownership in the firm and the appropriate share price, respectively, is *closest* to:

	Fractional ownership	Share price	
A)	23.33%	$115.00	✗
B)	89.64%	$3.63	✗
C)	89.64%	$4.05	✓

Explanation

The calculation requires four steps:

Step 1: Calculate the expected future value of Milat's $35 million investment in four years using an IRR rate of 40%:

W = ($35 million) × (1.40)4 = $134.46 million

Step 2: Milat's fractional ownership of the venture capital firm is the future expected wealth divided by the exit value:

f = $134.46 million / $150 million = 0.8964, or 89.64%

Step 3: Calculate the number of shares required by Milat (S_{pe}) for its fractional ownership of 89.64%:

S_{pe} = 1,000,000 [0.8964 / (1 – 0.8964)] = 8,652,510

Step 4: The share price is the value of Milat's initial investment divided by the number of shares Milat requires:

P = INV_1 / S_{pe} = $35 million / 8,652,510 = $4.05

(Note that both the NPV and IRR approach will yield the same answers.)

(Study Session 15, Module 44.4, LOS 44.j)

Related Material

SchweserNotes - Book 5

Question #21 of 54

The party in a private equity fund that has unlimited liability for the firm's debts, and this party's share in fund profits, respectively, is referred to as:

	Unlimited liability	Share in fund profits	
A)	General partner	Carried interest	✓
B)	Manager	Management fees	✗
C)	Limited partner	Distribution waterfall	✗

Explanation

Limited partners' liability does not extend beyond their capital investment, whereas general partners (the fund managers) have unlimited liability for the firm's debt. The general partner's share in fund profits is referred to as *carried interest*. Management fees are paid annually as a percentage of capital (NAV, paid-in-capital, or committed capital) and are not tied to fund profits.

(Study Session 15, Module 44.2, LOS 44.f)

Related Material

SchweserNotes - Book 5

Question #22 of 54

A private equity fund pays a management fee of 3% of PIC and carried interest of 20% to the general partner using the total return method based on committed capital. In 2008 the fund has drawn down 80% of its committed capital of $250 million, and has a net asset value (NAV) before distributions of $260 million. The 2008 management fee and carried interest paid, respectively, is (in millions):

	Management fee	Carried interest	
A)	6.0	2.0	✓
B)	7.8	2.0	✗
C)	7.5	50.0	✗

Explanation

(All dollar figures are in millions)

Management fee is paid annually on paid-in capital (PIC), which is just cumulative capital drawn down. 2008 management fee is thus 3% of $200, or $6.0.

Carried interest is the profit distributed to the general partner. The fund specifies a total return method based on *committed* capital and is calculated as the excess of NAV before distributions above committed capital. The 2008 carried interest paid out is then 20% of ($260 − $250) = $2.0.

(Study Session 15, Module 44.3, LOS 44.i)

Related Material

SchweserNotes - Book 5

Question #23 of 54

An implicit cost in private equity of additional financing or issuing stock options to management is called:

A) capital cost.

B) management and performance cost.

C) dilution cost.

Explanation

Management and performance cost is the explicit cost of manager compensation as a percentage of committed capital and annual fund performance. Capital costs are not discussed as a cost in private equity.

Dilution is the implicit cost of reduced investor value when firms take on additional financing or when stock options are granted (and exercised) by management.

(Study Session 15, Module 44.2, LOS 44.g)

Related Material

SchweserNotes - Book 5

Question #24 of 54

Which of the following lists *correctly* identifies exit routes in private equity, arranged from lowest to the highest exit values?

A) Initial public offering (IPO), management buyout, secondary market sale.

B) Liquidation, secondary market sale, IPO.

C) Management buyout, liquidation, IPO.

Explanation

Liquidation is a sale of last resort for bankrupt or insolvent firms and generally results in low exit values. The value realized on the sale to management in a management buyout typically varies, but lags behind values from a secondary market sale or an IPO.

A secondary market sale is analogous to a private sale of the firm to another firm. Secondary market sales use large amounts of debt financing and could result in the second highest valuation after an IPO. An IPO is a sale of the entire firm or part of the firm (e.g. a division) to the public. As a result of the increased post-IPO liquidity, transparency and access to capital, the private equity firm can realize the highest exit value of a firm through the IPO process.

(Study Session 15, Module 44.2, LOS 44.e)

Related Material

SchweserNotes - Book 5

Question #25 of 54

Contrary to most public companies, the magnitude that debt is typically utilized in private equity (PE) firms and the way this debt is quoted, respectively, is:

	Debt is utilized	Debt is quoted	
A)	less heavily	as a multiple of sales	✗
B)	more heavily	as a multiple of EBITDA	✓
C)	more heavily	as a multiple of equity	✗

Explanation

PE firms typically use higher leverage than most public companies do, especially in leveraged buyout investments. Debt is usually quoted as a multiple of EBITDA, while public firm debt is usually quoted as a multiple of equity (debt-to-equity ratio).

(Study Session 15, Module 44.1, LOS 44.a)

Related Material

SchweserNotes - Book 5

Question #26 of 54

A private equity investor expects to realize a return on her venture capital investment in two years and expects to sell the firm for $30 million. She estimates that a discount rate of 30% is reasonable but expects that there is a 20% probability of failure in any given year. The post-money value of her investment today, adjusted for failure, is *closest* to:

A) $11.36 million.

B) $11.20 million.

C) $14.20 million.

Explanation

The investor must first adjust the discount rate for the probability of failure:

> r* = (1 + r) / (1 − q) − 1, where *r* is the unadjusted discount rate, and *q* is the probability of failure.
>
> r* = (1 + 0.30) / (1 − 0.20) − 1 = 0.625

To determine the post-money valuation, the projected future value must then be discounted at the adjusted discount rate:

> $POST = FV / (1 + r^*)^N = (\$30 \text{ million}) / (1.625)^2 = \$11.36 \text{ million}$

(Study Session 15, Module 44.5, LOS 44.k)

Related Material

SchweserNotes - Book 5

Question #27 of 54

The primary advantage of an initial public offering (IPO) as an exit route in private equity is that it:

A) offers the highest exit value potential.

B) is appropriate for firms regardless of firm size and operating history.

C) is more cost-efficient and flexible than alternative exit routes.

Explanation

A private equity firm can generally realize the highest exit value for a portfolio company through an IPO, as the post-IPO firm offers greater liquidity (it is continuously traded on an open exchange) and access to capital. IPOs, however, are costly to implement and involve a complex process that ranges from dealing with underwriters, gauging market interest and complying with various regulatory requirements. IPOs are also most appropriate for large firms with a stable operating history.

(Study Session 15, Module 44.2, LOS 44.e)

Related Material

SchweserNotes - Book 5

Question #28 of 54

The private equity firm Purcell & Hyams (P&H) is considering a $17 million investment in Eizak Biotech. Eizak's owners firmly believe that with P&H's investment they could develop their "wonder" drug and sell the firm in six years for $120 million. Given the project's risk, P&H believes a discount rate of 30% is reasonable.

The pre-money valuation (PRE) and P&H's fractional ownership, respectively, are *closest* to (in millions):

	PRE	Fractional ownership	
A)	$24.86	0.68	✗
B)	$7.86	0.68	✓
C)	$7.86	0.14	✗

Explanation

Step 1: The exit value must first be discounted at the appropriate discount rate to its present value to arrive at the post-money (POST) valuation (all dollar figures in millions):

$$POST = (\$120) / (1.30)^6 = \$24.86 \text{ million.}$$

Step 2: The pre-money valuation is Eizak's current value without P&H's investment:

$$PRE = \$24.86 \text{ million} - \$17 \text{ million} = \$7.86 \text{ million.}$$

Step 3: P&H's fractional ownership is the value of its investment as a fraction of Eizak's POST valuation:

$$f = INV / POST = \$17 / \$24.86 = 0.68.$$

(Study Session 15, Module 44.4, LOS 44.j)

Related Material

SchweserNotes - Book 5

Question #29 of 54

A private equity firm makes an investment in a portfolio company and calculates that the firm should hold 1,000,000 shares at a price of $15.00 per share using the IRR approach. The founders of a portfolio company currently hold 300,000 shares. The appropriate post-money (POST) valuation is:

A) $13 million. ✗

B) $15 million.

C) $19.5 million.

Explanation

Since we have no information on exit value or the IRR rate, but the share price and number shares held by each party is given, the post-money valuation (POST) is calculated as:

POST = shares price x total number of shares = $15 × (1,000,000 + 300,000) = $19.5 million.

(Study Session 15, Module 44.4, LOS 44.j)

Related Material

SchweserNotes - Book 5

Question #30 of 54

The pair of terms that *correctly* identifies the method of profit distribution between limited partners (LPs) and general partners (GPs), and the allocation of equity between shareholders and management of a portfolio company, respectively, is:

	Method of profit distribution	Equity allocation
A)	Carried interest	Distribution waterfall
B)	Ratchet	Carried interest
C)	Distribution waterfall	Ratchet

Explanation

Distribution waterfall identifies the profit allocation between LPs and GPs and specifies when GPs can receive carried interest. *Ratchet* refers to the equity allocation between shareholders and management. *Carried interest* is the GP's share in fund profits.

(Study Session 15, Module 44.2, LOS 44.f)

Related Material

SchweserNotes - Book 5

Question #31 of 54

The Jefferson Group is a large private equity firm managing a multi-billion dollar portfolio. Which of the following is the *least likely* source of value-added the Jefferson Group would provide to its portfolio companies (as compared to a public firm)?

A) Aligning the interests between private equity owners and limited partners. ✓

B) Reengineering the portfolio companies. ✗

C) Obtaining cheap credit. ✗

Explanation

The three sources of value-added a private equity firm provides over public firms are: reengineering the portfolio firms, obtaining debt on favourable terms (cheap credit), and aligning the interests between private equity owners (the limited partners) and portfolio managers.

(Study Session 15, Module 44.1, LOS 44.a)

Related Material

SchweserNotes - Book 5

Question #32 of 54

Private equity values have declined significantly over the last year. Which of the following risk factors is the *least likely* reason for the decline?

A) Market risk. ✗

B) Tax risk. ✓

C) Investment-specific risk. ✗

Explanation

Market risk is the risk of long-term changes in interest rates, exchange rates and economic risk. Certainly all of these have been factors in the less than spectacular private equity returns recently. Investment-specific risk is probably the most important source of risk in recent times, as many private equity investments suffered significant losses as a result of the subprime mortgage and real estate meltdown. Tax risk is the risk of tax changes over time, which has not been a significant factor in private equity valuations recently.

(Study Session 15, Module 44.2, LOS 44.g)

Related Material

SchweserNotes - Book 5

Question #33 of 54

The Austrian private equity firm RD primarily makes leveraged buyout investments as the firm's management strongly believes that debt makes companies more efficient. The *least likely* explanation of management's rationale is to:

A) increase firm efficiency.

B) transfer risk.

C) reduce the interest tax shield.

Explanation

A PE firm's debt is frequently securitized and repackaged as collateralized debt or loan obligations, resulting in a transfer of risk to the debt buyer. Greater use of debt also requires disciplined and timely payment of interest, causing a PE firm's portfolio companies to use free cash flow efficiently. Higher leverage generally increases the tax savings from the use of debt (the interest tax shield) increasing firm value in the meantime.

(Study Session 15, Module 44.1, LOS 44.a)

Related Material

SchweserNotes - Book 5

Question #34 of 54

A private equity investor is considering making an investment in a venture capital firm. The investor values the firm at $1.5 million following a $300,000 capital investment by the investor. The venture capital firm's pre-money (PRE) valuation and the investor's proportional ownership, respectively, are:

	PRE valuation	Ownership proportion
A)	$1.5 million	20%
B)	$1.5 million	25%
C)	$1.2 million	20%

Explanation

The pre-money valuation (PRE) is simply the venture capital firm's post-money valuation (POST) less the capital investment (INV):

PRE = POST − INV = $1.5 million − $300,000 = $1.2 million.

The ownership proportion is the investor's fractional ownership of the firm value after the capital infusion:

Ownership proportion = INV/POST = $300,000 / $1.5 million = 0.20 or 20%.

(Study Session 15, Module 44.1, LOS 44.c)

Related Material

SchweserNotes - Book 5

Question #35 of 54

Which of the following is the *least likely* disadvantage in calculating the net asset value (NAV) for a private equity fund?

A) Only capital commitments already drawn down are included in the NAV calculation.

B) NAV may be difficult to calculate since firm values are not known with certainty prior to exit.

C) The limited partners use a third party to calculate the NAV of a private equity fund.

Explanation

NAV is usually calculated by the fund's general partner, which could result in a subjective and inflated NAV. Limited partners, however, often use third party valuations to arrive at an objective and up-to-date NAV. This scenario thus describes a countermeasure to an issue in calculating NAV rather than a disadvantage itself.

The other two answers are both disadvantages in calculating NAV.

(Study Session 15, Module 44.2, LOS 44.f)

Related Material

SchweserNotes - Book 5

Question #36 of 54

Christina Wagner is a CFA level II candidate currently studying about hedge funds, private equity and commodity futures. One of her friends is fascinated by what Wagner is learning and asks several questions on the topic. In particular, she is curious to know what exit options are available to a promising young venture capital (VC) firm if it is having difficulty attracting buyers due to poor market conditions. What should be Wagner's *most appropriate* response?

A) The VC firm should be liquidated in the absence of prospective buyers through the sale of the firm's assets.

B) Since an initial public offering is not feasible, the VC firm should be sold to another firm through a buyout or secondary market sale.

C) The VC firm should consider the acquisition of another firm and sell the merged entity once capital market conditions have improved.

Explanation

Liquidation occurs when a firm becomes insolvent or bankrupt, cannot function as an independent entity, and there are very few or no interested buyers. Liquidation results in low exit values. Selling the VC firm through a buyout or secondary market sale is also less feasible since these transactions require significant debt financing which the young VC firm may be unable to support.

In poor market conditions it may be feasible for the VC firm to make a strategic acquisition through a merger and sell the merged entity once market conditions have stabilized.

(Study Session 15, Module 44.2, LOS 44.e)

Related Material

SchweserNotes - Book 5

Question #37 of 54

Private equity firms can maintain control over portfolio companies in a variety of ways. Which of the following contract terms would *least likely* achieve this goal?

A) Board representation. ✗

B) Priority in claims. ✗

C) Tag-along, drag-along clauses. ✓

Explanation

A tag-along, drag-along clause is less a control mechanism for private equity firms and more a tool to tie portfolio manager interests to the portfolio companies. The clause gives portfolio managers the right to obtain an equity stake in the portfolio companies should the private equity firm decide to dispose of its holding.

Priority in claims and board representation are both effective tools that give PE firms greater control over portfolio companies. Priority in claims allows the PE firm to receive distributions before all other owners. Should the portfolio company experience a major event (bankruptcy, restructuring, IPO, etc.), the private equity firm can gain control of the company through board representation.

(Study Session 15, Module 44.1, LOS 44.b)

Related Material

SchweserNotes - Book 5

Question #38 of 54

The primary difference between the venture capital method using the IRR and NPV approach is that:

A) the IRR approach starts by calculating the investor's expected future wealth. ✓

B) the NPV approach does not require fractional ownership calculations. ✗

C) the IRR method does not use exit values.

Explanation

The IRR approach in venture capital firm valuations can be thought of as a reverse NPV calculation, where the IRR rate is used to first calculate the investor's expected future wealth.

Both the IRR and NPV approach use exit values and fractional ownership calculations.

(Study Session 15, Module 44.4, LOS 44.j)

Related Material

SchweserNotes - Book 5

Question #39 of 54

Mavis Krager, manager of alternative investments for the Richmond Group, is considering the merits of some private-equity opportunities. Richmond Group likes to invest in private-equity funds, but will also do its own deals if the opportunity is right. One deal on the table is an equity stake in Melton Motors, a chain of privately held auto dealerships. The company is well run, but has come upon hard times lately because of credit problems. Krager thinks Melton will solve its financial problems and become profitable again. She is considering investing $7 million in the company. Also under discussion is The Apple House, a large privately held orchard in Wisconsin. Richmond Group is considering investing $5 million.

To determine whether the deals are worthwhile Krager decides to estimate a price for each company based on a post-money valuation, using a discount rate of 13.7%. The investment firm prefers to focus on companies willing to price their stocks at least 20% below their true value and fund the investments only once. To calculate her valuations, Richmond uses the data below:

	Melton Motors	The Apple House
Stock price offered	$17	$42
Number of shares held by current owners	1.5 million	80,000
Estimated value of company at end of investment period	$51 million	$29 million
Expected length of investment	5 years	10 years

Just as Krager finishes her assessment of the two private-equity deals, a contact at The Apple House calls her and says the management team is considering a leveraged buyout (LBO) and wants Richmond Group to help finance it. Since the firm hasn't financed an LBO for years, Krager gets out a book she has not read since college to bone up on the valuation equations and reacquaint herself with terms specific to LBOs.

What action should Richmond Group take with regard to:

	Melton Motors	The Apple House	
A)	Don't buy stake	buy stake	✗
B)	Buy stake	don't buy stake	✗
C)	Don't buy stake	don't buy stake	✓

Explanation

Step 1: Discount the future value of the company to obtain the post-money valuation (POST).

POST = future value / $(1 + r)^{\text{investment period}}$

POST for Melton = \$51 million / $(1 + 13.7\%)^5$ = \$26.839 million.

POST for Apple = \$29 million / $(1 + 13.7\%)^{10}$ = \$8.031 million.

Step 2: Calculate pre-money valuation.

PRE = POST − investment.

PRE for Melton = \$26.839 million − \$7 million = \$19.839 million.

PRE for Apple = \$8.031 million − \$5 million = \$3.031 million.

Step 3: Determine the fractional ownership.

F = INV / POST

F for Melton = \$7 million / \$26.839 million = 26.08%.

F for Apple = \$5 million / \$8.039 million = 62.26%.

Step 4: Determine the number of shares the firm must buy.

Stake = Entrepreneurs' shares × [F / (1 − F)].

Stake for Melton = 1.5 million * [26.08% / (1 − 26.08%)] = 529,258 shares.

Stake for Apple = 80,000 * [62.26% / (1 − 62.26%)] = 131,951 shares.

Step 5: Calculate stock price per share.

P = INV / Stake

P for Melton = \$7 million / 529,258 = \$13.23

P for Apple = \$5 million / 131,951 = \$37.89

Melton's calculated value is 22% below the current offer price. Apple's is 9.8% below the current offer price. Richmond Group should not buy either stake.

(Study Session 15, Module 44.4, LOS 44.j)

Related Material

SchweserNotes - Book 5

Zolan Athos and Katie Brie co-manage one of the funds of The Ceskel Group, a large private equity firm based in Canada. The fund, established in 2004, has total assets of \$500 million and invests primarily in real estate firms ranging from new ventures to leveraged buyouts of larger, established companies. The fund will reopen to outside investors next year and is looking to raise an additional \$250 million to make strategic investments over the next two years, after which the fund will be closed to new capital.

In one of the meetings with potential investors, Athos and Brie discuss their recommendations for investment and acquisition opportunities. When questioned by an investor on exit strategies and terminal value projections, Brie makes the following statements:

Statement 1:	One possible exit route is through an IPO. An IPO generally offers a higher potential exit value than a management buyout or liquidation.
Statement 2:	We favor IPOs since they are appropriate for firms of any size, regardless of their growth prospects or lack of operating history.

Athos adds the following comments on terminal value projections:

Statement 3:	For venture capital projects, estimating terminal value with certainty is difficult given the relatively young age of these firms. To calculate the investor's future wealth, however, one valuation technique is the IRR method.
Statement 4:	To project the terminal value for leveraged buyout (LBO) investments, we often use the free cash flow method or sales or earnings multiples approach.

Following their meeting with the investors, Athos and Brie meet privately to assess the fund's recent performance. Athos and Brie charge 1.5% to manage the fund, and carried interest of 25% is paid based on the total return method using committed capital. The fund's investors committed to a total of $500 million in capital over ten years. A scaled-down version of the firm's statistics for the last five years is given in the following table (in $ millions):

Fund Cash Flows						
	Capital Called Down	OperatingResults	MgmtFees	NAV before Distributions	Distributions	NAV after Distributions
2004	200	-40	3.0	157.0	0	157.0
2005	100	-70	4.5	182.5	0	182.5
2006	100	100	6.0	376.5	70	306.5
2007	50	180			100	
2008	50	250			150	

Finally Athos and Brie discuss two potential acquisition targets. The first is a venture capital firm with a projected discount rate of 20%. Athos and Brie, however, believe that this projection is highly optimistic given current market conditions, and speculate that in any given year there is a 30% chance of company failure. The second acquisition would be an investment in a leveraged buyout company.

The company's asset beta is estimated at 0.90 and the company uses 1/3 debt and 2/3 equity financing.

Question #40 of 54

With regard to Statement 1 and 2, respectively, on an exit strategy through an IPO, Brie is:

	Statement 1	Statement 2	
A)	Correct	Incorrect	✓
B)	Incorrect	Correct	✗
C)	Incorrect	Incorrect	✗

Explanation

An IPO traditionally offers the highest exit value due to higher liquidity and better access to capital. IPOs, however, are generally quite costly to implement and less flexible, and are most appropriate for firms with a high growth potential and considerable operating history.

(Study Session 15, Module 44.2, LOS 44.f)

Related Material

SchweserNotes - Book 5

Question #41 of 54

With regard to Statement 3 and 4 on terminal value projections of the venture capital and LBO investments, respectively, Athos is:

A) incorrect on Statement 3 since the IRR method is useful in obtaining present value projections but cannot be used as a tool to compute the future expected wealth of a ✗

B) correct on both statements. ✓

C) incorrect on Statement 4 since the free cash flow method and the sales or earnings multiples are not useful for investments financed to a large extent by debt. ✗

Explanation

Statement 3 is correct. One way to visualize the IRR method is to think of the venture capital method using NPV in reverse. With the IRR method, the investor's present investment is compounded at the IRR rate over t (number of years to exit) to arrive at the investor's expected future wealth.

Statement 4 is also correct. Private equity firms frequently use the free cash flow or a sales or earnings multiple approach to project terminal values. Debt (both junior and senior) is factored into these calculations.

For answers to questions 3-5, refer to the following table:

Fund Cash Flows							
	Capital Called Down	Operating Results	Mgmt Fees	NAV before Distributions	Carried Interest	Distributions	NAV after Distributions
2004	200	-40	3.0	157.0	0	0	157.0
2005	100	-70	4.5	182.5	0	0	182.5
2006	100	100	6.0	376.5	0	70	306.5
2007	50	180	**6.8**	**529.8**	**7.4**	100	**422.3**
2008	50	250	**7.5**	**714.8**	**46.3**	150	**518.5**

Management fees are 1.50% of cumulative called down capital (paid-in capital).

NAV before distributions for any year is the NAV after distributions of the prior year, plus new capital called down, plus operating results, less management fees.

Carried interest is discussed below.

NAV after distributions for any year is NAV before distributions less carried interest less any distributions.

(Study Session 15, Module 44.2, LOS 44.f)

Related Material

SchweserNotes - Book 5

Question #42 of 54

Based on information in the table above, management fees and carried interest, respectively, in 2007 will be *closest* to (in $ millions):

	Management Fee	Carried Interest
A)	$3.50	$8.30

B) $0.75 $8.90

C) $6.80 $7.45

Explanation

2007 management fees are calculated as 1.50% of paid-in capital. 2007 paid-in capital is $200 + $100 + $100 + $50 = $450. Management fees are 1.50% of $450, or $6.75.

Carried interest is the general partner's share of fund profits. It is calculated based on the total return (NAV before distributions) method using *committed* capital. Total capital commitment by investors is $500 million. In 2007 NAV before distributions was $529.8, exceeding committed capital for the first time.

Carried interest is 25% of NAV before distributions less committed capital, or (0.25)($529.8 − $500) = $7.45.

(Study Session 15, Module 44.2, LOS 44.f)

Related Material

SchweserNotes - Book 5

Question #43 of 54

Carried interest to the fund's partners will first be paid out in:

A) 2007.

B) 2008.

C) 2006.

Explanation

Carried interest is paid to the general partners based on the total return method using *committed* capital. Carried interest will thus be only paid when total return (as measured by NAV before distributions) exceeds the committed capital of $500 million. The first year that carried interest would be paid is 2007.

(Study Session 15, Module 44.2, LOS 44.f)

Related Material

SchweserNotes - Book 5

Question #44 of 54

The fund's distributed to paid in capital (DPI) and residual value to paid in capital (RVPI) multiples, respectively, for 2008 will be *closest* to:

	DPI	RVPI	
A)	3.00	1.43	✗
B)	0.64	1.04	✓
C)	0.30	1.43	✗

Explanation

DPI measures the limited partners' (LPs') realized return in the fund. DPI is calculated as the cumulative distributions divided by the paid-in capital. Cumulative distributions for 2008 were $150 + $100 + $70 = $320. Paid-in capital in 2008 was $200 + $100 + $100 + $50 + $50 = $500.

The ratio of cumulative distributions to paid-in capital is $320/$500 = 0.64

RVPI measures the LPs' unrealized return in the fund. It is calculated by dividing the NAV after distributions by the paid-in capital. NAV after distributions in 2008 was $518.5.

The ratio of NAV after distributions to paid-in capital is $518.5/$500 = 1.037

(Study Session 15, Module 44.2, LOS 44.f)

Related Material

SchweserNotes - Book 5

Question #45 of 54

Regarding the potential acquisition targets discussed by Athos and Brie, the venture capital firm's discount rate adjusted for failure is *closest* to:

	Adjusted discount rate	
A)	28.57%	✗
B)	11.45%	✗
C)	71.43%	✓

Explanation

The venture capital firm's discount rate adjusted for the probability of failure is calculated as follows:

$$r^* = \frac{1 + 0.20}{1 - 0.30} - 1 = 0.7143, \text{ or } 71.43\%$$

(Study Session 15, Module 44.2, LOS 44.f)

Related Material

SchweserNotes - Book 5

Question #46 of 54

RDO is a private equity fund with $50 million in committed capital and an investment in three portfolio companies totalling $30 million. The fund earned a healthy profit of $5 million after its first year on the sale of one of the companies but suffered a $2 million loss after its second year on the sale of the second company. The fund pays carried interest of 20% on a *total return basis* using committed capital and also has a clawback provision.

The clawback the general partner must pay at the end of the second year is:

A) $400,000.

B) $600,000.

C) $0.

Explanation

A clawback provision in a private equity prospectus requires the general partner to repay part of previously distributed profits if the fund subsequently underperforms.

Since carried interest is paid on a total return basis using committed capital, the general partner of RDO would only receive interest when the portfolio value exceeds committed capital ($50 million). First-year profit is $5 million, bringing the portfolio value to $35 million, therefore no carried interest is paid. Since no profit was distributed to the general partner in the first year, a clawback does not apply in the second year.

(Study Session 15, Module 44.2, LOS 44.f)

Related Material

SchweserNotes - Book 5

Question #47 of 54

A private equity investor is considering an investment in a venture capital firm, and is looking to calculate the firm's terminal value. The investor determines that there is equal likelihood of the following:

1. Expected firm earnings are $2.5 million with a P/E ratio of 8.
2. Expected firm earnings are $3.0 million with a P/E ratio of 10.

The firm's expected terminal value, and the analysis used by the investor, respectively, is:

	Terminal value	Analysis
A)	$50 million	Scenario
B)	$2.75 million	Sensitivity
C)	$25 million	Scenario

Explanation

The investor is using *scenario* analysis to determine the venture capital firm's terminal value. The terminal value under each scenario is calculated by multiplying the expected earnings by the P/E ratio:

Scenario 1: $2.5 million × 8 = $20 million

Scenario 2: $3.0 million × 10 = $30 million

The expected terminal value is then the weighted value under each scenario:

Expected terminal value = (0.50)($20 million + $30 million) = $25 million.

(Study Session 15, Module 44.5, LOS 44.k)

Related Material

SchweserNotes - Book 5

Question #48 of 54

In a private conversation with his best friend, Harry Veeslay, CFA, makes the following statements:

Statement 1:	Private equity (PE) firms generally focus on short-term results. For example, they frequently use restructuring of acquired companies in an effort to quickly divest them for a profit.
Statement 2:	PE firms also want to ensure that the interests of portfolio company managers and of limited partners are aligned. For example, they frequently tie manager compensation to firm performance and include *tag-along*, *drag-along* clauses to give management a stake in the firm under certain trigger events.

With regard to Veeslay's statements:

A) only one is correct. ✓

B) both are incorrect. ✗

C) both are correct. ✗

Explanation

Statement 1 is incorrect. PE firms tend to have a long-term, rather than short-term focus in their investment strategies, which often exceeds 10 years. Restructuring is generally a lengthy process and requires a long-term perspective.

Statement 2 is correct with regard to both manager compensation and the use of *tag-along, drag-along clauses.*

(Study Session 15, Module 44.1, LOS 44.b)

Related Material

SchweserNotes - Book 5

Question #49 of 54

The *most appropriate* pairing for valuing a buyout and a venture capital investment, respectively, is:

	Buyout	Venture capital	
A)	Relative value approach	Discounted cash flow	✗
B)	Pre-money valuation	Relative value approach	✗
C)	Discounted cash flow	Pre-money valuation	✓

Explanation

Buyout investments have predictable cash flows and there are typically several comparable firms in the industry. Both the discounted cash flow and relative value approach are thus reasonable valuation techniques for buyout firms.

Venture capital firms, on the other hand, have less stable cash flows and few industry comparables given their young age and position in the business life cycle. Pre- and post-money valuation techniques are frequently used valuations for these firms.

(Study Session 15, Module 44.1, LOS 44.c)

Related Material

SchweserNotes - Book 5

Question #50 of 54

Pauler Investment Co. ("Pauler") just proposed to make a sizeable investment in Bada Cork, a recently established Hungarian producer of synthetic wine bottle corks with a patented new technology. Pauler is looking to make further strategic acquisitions in small venture capital companies in the food and beverage industry and has set up a fund to manage the portfolio companies. It has also brought onboard Kristina Sandorf as portfolio manager. Upon receiving her contract, Sandorf complains to a friend of the contract terms proposed by Pauler. In particular, she grumbles that an *earn-out* clause is inserted, which she believes would give Pauler priority on the earnings and dividends of companies in the portfolio ahead of herself.

In her description of *earn-outs*, Sandorf is:

A) incorrect, because earn-outs refer to tying the acquisition price paid by Pauler for the portfolio companies to the companies' future performance.

B) incorrect, because earn-outs refer to Pauler having priority over Bada's assets in case of bankruptcy or liquidation.

C) correct.

Explanation

Earn-outs are typically used in venture capital investments where the acquisition price paid for portfolio companies by private equity firms is tied to the companies' future performance.

(Study Session 15, Module 44.1, LOS 44.b)

Related Material

SchweserNotes - Book 5

Question #51 of 54

The net asset value (NAV) *after* distributions of a private equity fund is calculated as:

A) NAV before distributions + Carried interest – Distributions.

B) NAV before distributions + Capital called down – Management fees.

C) NAV before distributions – Carried interest – Distributions.

Explanation

NAV after distributions is calculated as NAV before distributions minus carried interest (the general partner's profit from the fund) minus distributions from the fund.

(Study Session 15, Module 44.3, LOS 44.i)

Related Material

SchweserNotes - Book 5

Question #52 of 54

An analyst makes the following statements on the risk and costs of private equity investments:

Statement 1:	Committed capital is the initial capital in a private equity fund to obtain first round financing. As committed capital is used up, investors are required to make additional commitments to finance firm projects and expansion.
Statement 2:	The J-Curve refers to the risk pattern in a private equity investment over time. Risk in private equity investments initially typically declines as more capital is drawn down but increases closer to exit since exit timing and values are difficult to predict.

With respect to the analyst's statements:

A) both are correct.

B) both are incorrect.

C) only one is correct.

Explanation

Both statements are incorrect. Committed capital refers to the amount of funds investors committed to over the life of the private equity fund. Funds from committed capital are drawn down over time as the firm needs more capital. If the firm needs financing beyond investors' committed capital, it would have to look for additional sources of funds.

The J-Curve refers to a pattern in private equity investment return, not risk. The return on investments usually declines initially, then increases as exit nears.

(Study Session 15, Module 44.2, LOS 44.g)

Related Material

SchweserNotes - Book 5

Question #53 of 54

A private equity firm is considering the valuation characteristics of both a venture capital and a buyout investment. Increasing working capital requirements and stable EBITDA growth is *most likely* associated with:

	Increasing working capital	Stable EBITDA growth	
A)	Buyout	Buyout	✗
B)	Buyout	Venture capital	✗
C)	Venture capital	Buyout	✓

Explanation

Venture capital investments often have high and increasing working capital (current assets less current liabilities) requirements to finance growth. Buyouts typically have low requirements due to more reliable cash flows and earnings and a substantial asset base.

Stable EBITDA (or EBIT) growth is generally a characteristic of buyout investments. These firms traditionally have a history of stable sales and cash flows and have already established a strong market position. The high amount of debt required by the private equity firm to make the investment also requires that the buyout firm have stable and steady earnings to finance the interest payments.

(Study Session 15, Module 44.1, LOS 44.c)

Related Material

SchweserNotes - Book 5

Question #54 of 54

Dr. Jason Bruno is a qualified investor in the US who is considering a $10 million investment in a private equity fund. Upon reading the fund's prospectus, Dr. Bruno encounters several contract terms and expressions with which he is unfamiliar. In particular, he would like to know the meaning of *ratchet* and distributed paid-in capital (*DPI*). The *most appropriate* answer by the fund's manager to Dr. Bruno would be that ratchet and DPI, respectively, is:

	Ratchet	DPI
A)	The year the fund was set	Dividends paid out as a fraction of
B)	The general partner's share of	The general partner's realized
C)	The allocation of equity	The limited partner's

Explanation

Ratchet is a contract term that specifies the allocation of equity between management and shareholders.

DPI, or distributed to paid-in capital, is the cumulative distributions paid out from the fund as a fraction of cumulative invested capital. DPI measures the limited partners' realized return from the fund.

Note: The GP's share of fund profits is called *carried interest*. The year the fund was set up is called the *vintage*. There should be no distinction between realized and unrealized return for the GP. Also, there is no term for dividends over paid-in capital as dividends are seldom paid out from a private equity fund.

(Study Session 15, Module 44.3, LOS 44.i)

Related Material

SchweserNotes - Book 5