

IBW'17 Firm Interview Questions

Jefferies —

1. Walk me through your resume/Tell me about yourself.
2. Tell me about this internship experience on your resume.
3. Why banking?
4. What makes a good analyst? Follow up: How do you exhibit those qualities?
5. Why Jefferies specifically?
6. Who all have you spoken with at Jefferies?
7. Where else are you interviewing?
8. Where do we rank and why should we choose you?
9. What has been your favorite class? Least favorite class?
10. What do you do outside of the Investment Banking Workshop?
11. What is a time you failed?
12. What are the 4 main valuation techniques?
 - What are some pros and cons for each technique?
 - What techniques give you the highest/lowest valuation? Why?
13. What happens to the three financial statements when you have \$20 of depreciation?
14. How do you get to Enterprise Value if you have the share price?
15. If the EV/EBITDA of Company A is 10x and the EV/EBITDA of Company B is 8x, and they're both in the same industry, what would you say about the two companies? Give me examples of companies.
16. How do you get to FCF from EBITDA?
17. What goes into an accretion/dilution model? [Answered with formula].
18. Questions for us?

Bank of America [New York] —

1. What would your friends say about you? What do they like and dislike?
2. What would your past employers say about you? What do they like and dislike?
3. What are the differences between the rates of a bank debt and a bond?
4. What is the difference between a T-bill and a T-bond?
5. If you were to describe accretion/dilution to your mom, given she doesn't know anything about banking and business, how would you explain it?
6. Tell me how all the statements flow together
7. Asked about the Pitch comp and about the DCF and if I touched any models
8. Asked about what things affect WACC
9. Ways to value a company
10. Walk me through an LBO.
11. If you buy a company with \$100M EBITDA with \$400M in debt and \$200M in equity what is the purchase multiple?
 - What is the leverage multiple?
 - If the interest payment is \$50M, what is the coverage ratio?
 - Why are these important?
12. If in 5 years the company is earning \$200M in EBITDA, has \$200M in debt, has \$50 in Cash, and is sold for a 5.0x multiple, how much is the enterprise value?
 - What is the Cash on Cash return?
13. What is accretion/dilution?
14. If I buy a \$1 billion company with 75% debt, \$100M in EBITDA, \$150M in Net Income, with \$1 EPS what else do you need to know to determine if this deal is accretive or dilutive?
 - What is the new EPS? Is it accretive or dilutive?
15. Given the average EV/EBITDA multiple for competitors, cash, debt, share price, FDSO, and minority interest is this company over or undervalued? [Calculate Enterprise Value for the company, figure the multiple, and compare]

16. If you were on a roadshow for an IPO for your MD and the MD doesn't show up, what things are you going to try and learn about when you meet solo with the management team in order to report back to him/her? [assuming you are an analyst].
17. I want to know two things: (a) tell me a few things that are interesting about you that will make you stand out and (b) tell me why you are a risk for BAML
18. You have a grocery store and you are looking to value it. What are the ways and what considerations affect how you value the company?
19. You're from Chicago, what makes you think you can handle New York?
20. What is a weak beta? How about a distributor vs a game of roulette?
21. What do you do for fun?
22. For an all stock deal, which firms stock price do you need to know?
[Answer: acquirer because you need to divide total purchase price by it to determine new shares determined]
23. Which of the following multiples don't make sense:
EV/EBITDA
EV/net income
Equity/EBIT
24. What's the major difference in consideration for equity offerings (looking at projections) vs debt offerings (looking at historical numbers)
25. If the deal team was meeting a client about an IPO and no one made it but you, how would you handle the situation and what pieces of information/consideration would you relay back to your team
26. Walk through the 3 statements: You have a piece of equipment that you sold for \$150 and its book value is \$90.
27. Let's say a deal you've been working on for 3 months falls through, how would you deal with it?
28. I want to know two things: (a) tell me a few things that are interesting about you that will make you stand out and (b) tell me why you are a risk for BAML

RBC - NY, Super Day -

1. Why RBC?
2. Why banking
3. Tell me about yourself
4. What qualities make a good analyst / Do you have those qualities?
5. What are some financial and operational considerations for a spin-off?
6. Do you think a big-picture thinking style would be an impediment for an analyst?
7. What does it mean when a security is over/undervalued?
8. Why would you engage in an acquisition instead of building a business ground-up?

JP Morgan - Chicago, On-Campus -

1. Why JPM?
2. Why banking?
3. Tell me more about XYZ leadership position.
4. Would a distribution or a logistics company have a higher valuation? Why?
5. Shown EV/EBIT and EV/EBITDA multiples over two years. Does this growth pattern make sense? Why would this happen?
6. You have a Distribution company and a logistics company, with the same EBITDA multiples and same size etc. which would be valued more?
7. What other banks are you looking at? Why Chicago?
8. If you had a service company that received revenues from contracts, how would you project their revenues?
9. Favorite class / worst class
10. If you could pick any other job in the whole world besides banking what would it be

Houlihan Lokey Restructuring -

1. Tell me about yourself
2. Specifics about your resume

3. Why Houlihan Lokey

4. How familiar are you with restructuring

5. Given 2012 Revenue, EBITDA Margin, two levels of debt and an EV/EBITDA multiple,

- Find Enterprise Value

- Find Equity Value

6. Given current Rev [lower], EBITDA Margin, two levels of debt, and an EV/EBITDA multiple [lower]

- Find EV and equity value

- Find what the debt is priced at (since not all was covered by EV)

7. You have a company with 400 million dollars in senior notes, 350 million dollars of mezzanine debt, and an enterprise value of 1 billion dollars, what is equity value?

8. If your Enterprise value becomes 500 million dollars, what is your equity value now? In the event of a liquidation, who gets paid out first?

9. Tell me about yourself/general interest questions

10. What are the main types of valuation and which generally yields the highest multiple?

11. You have a stream of cash flows, starting at \$1000 that grows by 10% every year. With a 15% discount rate, what is the present value of that stream?

BAML Chicago –

1. Tell us about yourself – include your interests and what you do for fun

2. A few follow up questions about my story/resume

3. Who have you talked to at BAML Chicago? BAML elsewhere?

4. Tell me about a time you worked in a team

5. How to value a “mom and pop” car wash

- If no intrinsic valuation available
- If no market valuation available
- What kinds of multiples would be used
- Would these multiples be higher or lower than a large chain of car washes?
- Asked to argue both ways and why

Moelis Chicago –

1. What's share price? Given the following a pieces of info:

PE of 20

100 shares

Revenue:\$2000

50% Gross Margin

500 SGA[includes D&A]

1000 Debt [10% rate]

25% tax rate

EV/EBITDA is 7.5x

2. How many fully diluted shares?

\$20 share price

100 shares outstanding

Option #1: 10 shares, \$10 exercise price

Option #2: 10 shares, \$20 exercise price

2. A company has \$50M EBITDA, \$100M in Senior Debt, \$250M Junior debt. They are trading at 8x EBITDA, what is the market value of their equity. How about if they are trading at 6X EBITDA? If the implied equity value is 0, but there is no liquidity crisis and the shares are trading on the market, is there any value behind them? What would the break-even trading multiple be for equity holders?

3. Walk me through a DCF

4. What types of FCF can you get?
 - What discount rates would you use?
5. Walk me through an LBO
6. What kind of FCF do you use for an LBO?
7. Find the share price if you're given the following:
 - Revenue, Gross Margin, EV/EBITDA, PE, Shares Outstanding, SG&A, Tax Rate, Debt, Interest Rate.

Credit Suisse Chicago –

1. Dell buying EMC for 67 billion, what potential exit strategy would silverlake (the PE firm involved) most likely pursue later? IPO, Sell to financial acquirer, sell to strategic acquirer (assuming no divestitures)?

2. What's the square root of 99?

Answer: no exact number needed. just reason out that 99 is basically equal to 100 - sqrt of 100 is ten. Sqrt of 99 must be very close to ten. Something like 9.9

3. How do you project out revenues/cash flow if you can't use historical data or comparables?

Answer: utilize any relevant industry data/demand trends for the relevant product/demographic growth rates

4. Specifics on resume

5. Interest in the bank/where else am I interviewing

6. Where would I like to travel

7. Treasury stock method

8. Accretion/dilution

9. LBO questions (how to increase irr/ delved deeper in regards to the tranches of debt)

10. Company's present stock price is \$20 and currently has 100 shares outstanding. If it has 10 options at an exercise of \$10 and 10 options at an exercise price of \$20. Walk through the calculations related if they are exercised under the treasury stock method.

11. A company has an EV/EBITDA of 6x compared to another company in the same industry with a multiple of 10x. Explain why there might be a discrepancy in these two multiples

12. Why would you like to work in Chicago?

13. Treasury Stock Method: 100 shares trading at \$20 per share. There are 10 options exercisable at \$10 and 10 options exercisable at \$20. What is the fully diluted equity value?

Perella Weinberg Partners –

1st round description: PWP's interview was primarily fit focused with technical and market questions leaning more towards practical knowledge and application rather than straight forward answers (no formulaic questions or responses).

1. Tell me about yourself

2. What is the one thing on your resume you are most proud of

3. Tell me about your experience at _____ how does that apply to the skills of an analyst

4. Walk me through asset write down of 15MM with 3 years of straight line depreciation after year 1

5. General interest questions from resume

6. Do you believe that [Company you interned/worked for] is a good company? Why or why not?

7. Would [Company you interned/worked for] be a good candidate for an IPO? What about an LBO?

8. What do you think makes a good analyst? What about a great analyst?

9. \$1,000 piece of equipment, 5 year useful life. walk me through the asset write down after 2 years.

Stifel –

1. How would you come up with a value of a company with only revenue and industry information?

2. How is Beta calculated?

3. What is the CAPM formula?

4. Walk me through \$100 PPE removal with \$10 accumulated depreciation

5. You have a piece of equipment worth \$15M that has depreciated 2 years [given a 5 year useful life and straight-line depreciation], and for some reason or another, you have to throw out the piece of equipment. Walk us through how the statements are impacted.
6. They will also find something on your resume and turn it into a technical somehow.

William Blair —

1st round description: William Blair's interview revolved around a small set of fit questions especially regarding other firms interviewed with and city preferences. The technical questions were mostly straight forward with little to no deviation from formulaic responses.

1. Walk me through a DCF
2. How do you get from levered FCF from unlevered FCF
3. What is the discount rate for a DCF using levered FCF
4. What sort of metrics of debt would you look at in terms of if a company is too levered or not levered enough
5. You have two companies, one is an industrials company with stable cash flow and the other is a technology company with a 4 year contract that contains 95% of revenue streams. Which business could you put more leverage on and why? Which one would be a better candidate for an LBO? Why?
6. How do you calculate WACC?
7. What is more expensive debt or equity? Why?
8. Compare and contrast the leverage and EBITDA multiples for a Technology company with recurring revenues, low asset base and an industrial company with low margins and a strong asset base.
9. Walk me through \$20 revenue with a 50% gross margin with inventory paid with \$5 AR and \$5 Cash.
10. Walk me from revenue from FCF
11. Why subtract out a change in NWC?
12. How to get equity value from DCF?
13. Tell me about yourself
14. Why Blair
15. Why middle market
16. \$10 of depreciation through financial statements
17. Sell product for \$10, \$5 cash, \$5 A/R, how does it flow through
18. Are you interested in bulge bracket? Why middle market?
19. Walk through the 3 financial statements: You sell goods that cost \$5 for \$10. You are paid \$5 cash and the rest is credit.
20. Tell me what company can have more leverage on its balance sheet. A tech company with recurring revenue has high margins vs. a industrial company with steady cash flow and low margins.

Moelis NY —

1. Walk me through a DCF
 - What types of FCF can you get?
 - What discount rates would you use?
2. Walk me through an LBO
 - What kind of FCF do you use for an LBO?
3. Find the share price if you're given the following:
 - Revenue, Gross Margin, EV/EBITDA, PE, Shares Outstanding, SG&A, Tax Rate, Debt, Interest
 - Given revenue, total debt and interest %, ebit margin, tax rate, shares outstanding, and PE multiple, what is the stock price?
[Answer: get down to net income, multiply by p/e multiple, and divide by shares outstanding]
Given 100 ebitda, 10x multiple, 900 senior debt, and 200 junior debt, what is junior debt trading at?
[Answer: 50 cents]

Baird —

1. Greatest Strength/weakness
2. Greatest Failure

3. Dream Job
4. Asked about my pitch competition [multiples, strategy]
5. What is operating leverage
6. Who has high/low operating leverage
7. Specifics into operating leverage

Citi—

1. Pick a company, what drives their growth?
2. Why would one company have a higher PE than another company? [Potential for future growth]
3. Stock price of the company you chose
4. What is higher, EBIT or EBITDA?
5. What does Enterprise Value mean?
6. What is higher then, EV/EBIT or EV/EBITDA?
7. Your favorite color
8. A deal that you've been following
9. What affects the Cost of Equity in the markets, and how has the current economic market been effecting CoE
10. how has the M&A industry been? Undervalued/overvalued
11. why you?
12. What beta would you give an industrials company
13. What type of treasury bond yield would you use on the risk free rate for an industrials company
14. How has the cost of equity changed over the past 10 years [taking into account rfr before the recession]

Cain—

1. Pick a valuation method and walk me through it
2. What drives growth and what are the buckets of growth? [organic and inorganic]
3. Give us a little background on you
4. Can you tell me about your Public Finance class at LSE
5. Can you talk a little about your experience at PPM America?
6. What is Global Water Brigades
6. Why banking
7. Why Cain
8. You're from Chicago, why are you looking at New York
9. Where do we stand among the other firms you're looking at
10. Questions

Deutsche Bank—

1. In 30 seconds, walk me through your resume.
2. What are three words that your best friend will describe about you?
3. What are three words that your boss will describe about you?
4. What are three words that your worst enemy will describe you?
5. Why Chicago?
6. Why you?
7. Where are we on your list?
8. Why shouldn't we hire you?
9. What's something that is not in your resume that you want to share?
10. What is the angle between the hour and minute hand at 6:30?
11. What is the total enterprise value using Treasury Stock Method with the given information?
Common Shares: 100
Current Share Price: \$15
In-the-money Stock Options: 15
Exercise Price: \$10
Total Debt: \$500
Cash: \$200

Minority Interest: \$50

12. Do you have anything else you want to talk about?
13. What's your favorite movie?
14. Find TEV: 100 shares outstanding, \$15 per share, 15 Options, \$10 strike price, 500 debt, 300 cash, 50 minority interest. Treasury stock method
15. Issue a bond then use all proceeds to buy a piece of equipment, 10 year depreciation. 10% interest
16. How do dividends effect Equity Value and Enterprise Value
17. Calculate pro forma EPS
18. How do you calculate goodwill
19. Calculate new equity value with in the money shares
20. Give me a quick background on yourself (not shown by your resume)
21. Candidate of a good LBO
 - Different ways to increase IRR
22. Where do we stand in your rankings – "We want a number"
23. Favorite Song? Favorite Movie?
24. Find Enterprise Value given 100 shares trading at \$15 per share, 15 options exercisable at \$10, debt equal to \$500, cash balance of \$300, and minority interest of \$50.
25. How do you get to Enterprise Value if you have the share price?
26. If the EV/EBITDA of Company A is 10x and the EV/EBITDA of Company B is 8x, and they're both in the same industry, what would you say about the two companies? Give me examples of companies.
27. What has been your favorite class? Least favorite class?
28. What do you do outside of the Investment Banking Workshop?
29. What is a time you failed?

Unknown Firm –

- 1) Walk me through \$10 of depreciation
- 2) Why XYZ?
- 3) If a logistics company and distributor have the same EBITDA and growth rate, what would lead to different valuation methods?
- 4) What valuation method works best for XYZ? Why? What is another option?
- 5) How do you get to cash flows?
- 6) When do you use levered and unlevered cash flows?
- 7) How do you get equity value from a DCF?
- 8) Why NY/Chicago?
- 9) What other firms are you looking at?
- 10) How much leverage would you put on a tech company versus an industrial with lower margins?
- 11) How would you value each company (EBITDA multiple)
- 12) If we are going to pitch business to a client, and Goldman Sachs is our main competitor, what would you say to convince them that they should choose us? [from middle market perspective]
- 13) If we are evaluating a potential client, and you are tasked to prepare initial analysis, what items would you look at to check if this is a reasonable opportunity? [from risk perspective]
- 14) Given the stock price, walk me through to get to enterprise value.
- 15) If two companies are identical in margins, cap structure and industry, how could they have different EV/EBITDA multiples?

Practice Questions –

1. Company A is a pharmaceutical company. Company B is a Consumer and Retail company. You do a DCF on both of the companies for 20 years. Which company has a higher percentage of their Enterprise value from their Terminal Value?
2. Company A is acquiring company B. Company B's Enterprise Value is \$100mm with Debt to Total Capital being 60%. There is no cash on the balance sheet. Company A purchases Company B with a 50% equity premium. What is Company B's equity value for the acquisition?
3. Company A and Company B have an EBITDA value of \$50mm, but Company A has a higher value attached to it.

Why?

4. Company A and Company B are steel companies. Company A has a railroad company that purchases all of their products as they are created. Company B does not have a contract and sells their products on the open market. Which one has more demand? Does it affect WACC and if so, how?
5. You run a DCF on a company. Which option increase your FCF more? Increase revenue by \$10mm, decrease COGS by \$10mm or decrease Net Working Capital by \$10mm.
6. What are the reasons why a company would want to do a merger or acquisition?
7. Why would a company want a deal that is dilutive?
8. I have a company with debt of \$500mm and equity of \$500mm. The IRR for the company is 20%. What is the company's Enterprise Value in two years?
9. I have a company with a leverage ratio of 5.0x and a coverage ratio of 5.0x. What is the interest rate of the debt?
10. I have an investment that earns me \$100 in the first year, \$200 the second, and increase \$100 every year after forever. What is the present value of my investment?
11. If you have a 5.0x Revenue Multiple and a 25.0x EBITDA multiple, what is the EBITDA margin?
12. If you have a 10% cost of debt and you are purchasing a company with a P/E ratio of 10.0x, would this deal be accretive? Give me the specific P/E ratio for your company.
13. There are two companies with \$100mm in Enterprise value each. Company A has 100% equity and Company B has 50% debt and 50% equity. Equity for both firms doubles. Which one would a private equity firm like to purchase?
14. Which do companies prefer to do with their excess cash: dividends or share repurchase? Why?
15. If your company excises a cash dividend, how does that affect your P/E? Following this same line of reasoning, how would it affect your Enterprise Value and your EV/EBITDA multiple?
16. My company is very highly levered and has a hard time paying off its debt. In my company, I have two divisions, one is mature and the other one is our growth sector. What should I do in order to be able to pay off my debt?
17. Examples of companies with low, medium, and high betas
 - Low: Paper, Utilities, Agriculture, financial institutions
 - Medium: Healthcare, Pharmaceuticals, Apparel
 - High: Coal & Related Energy, Construction, Food Wholesalers, Real Estate
18. Assumptions made in a merger in terms of profit and loss
 - Synergies, interest, etc.
19. A company owns several concert venues – some small and some very large – how would you structure a pitch book designed to sell the company to strategic acquirers
 - Would strategics pay more or less for the company than financial sponsors and why?
20. One experience on your resume that best speaks to your ability to succeed in banking
21. A company has \$1 billion in cash... what could they use it for and WHY would they choose to use it in different ways
 - 5 uses of cash + explanation
22. What is a good LBO candidate in Bloomington and why?
23. A company has 100 shares outstanding at \$15/share
15 options with a strike price of \$10
Debt = \$500
Cash = \$300
Minority Interest = \$50
24. Start with Treasury Stock Method then find Total Enterprise Value